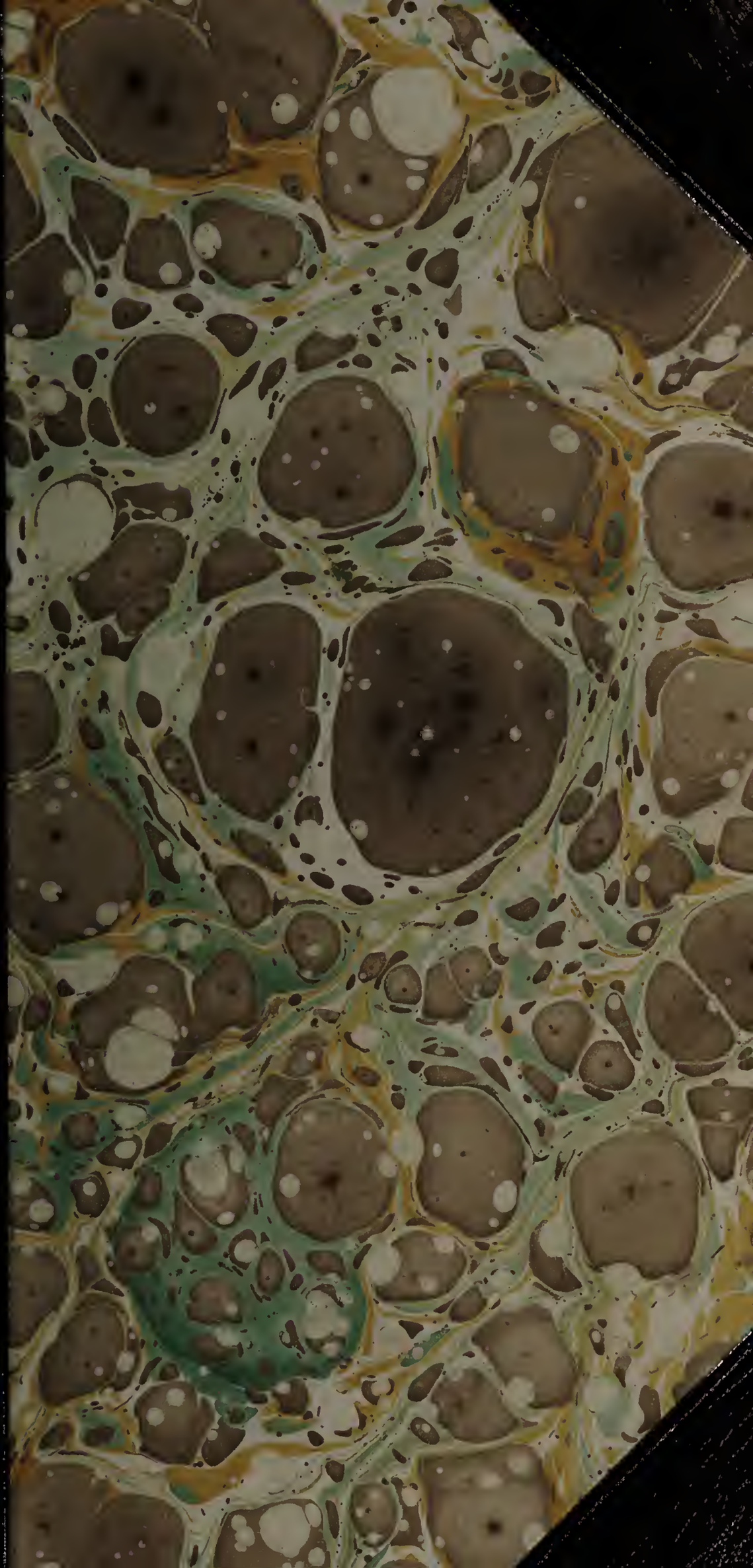

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# A NEW SYSTEM OF THE SPLEEN, VAPOURS, AND Hypochondriack Melancholy:

Wherein all the

DECAYS of the NERVES,

AND

LOWNESSES of the SPIRITS,

are mechanically Accounted for.

To which is ſubjoin'd,

A DISCOURSE upon the *Nature*, *Cauſe*, and *Cure*, of MELANCHOLY, MADNESS, and LUNACY.

With a particular

DISSERTATION on the *Origine* of the PASSIONS; the *Structure*, *Mechaniſm*, and *Modulation* of the NERVES, neceſſary to produce *Senſation* in ANIMAL BODIES.

To which is prefix'd,

A PHILOSOPHICAL ESSAY concerning the *Principles* of *Thought*, *Senſation*, and *Reflection*; and the Manner how thoſe noble Endowments are diſconcerted under the foregoing *Diſeaſes*.

By NICHOLAS ROBINSON, M.D.
and of the *College of Phyſicians*, *London*.

——— *In Magnis & Voluiſſe ſat eſt.*
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181

To the Honourable

# *Sir* Hans Sloane *Bar.*

PRESIDENT of the

COLLEGE of PHYSICIANS,

And PRESIDENT of the

*ROYAL SOCIETY.*

*SIR,*

THERE present you with *A New System of the Spleen, Vapours, and Hypochondriack Melancholy*; and as it is a Subject attended

with the moſt perplexing Difficulties, to whom could I ſo properly addreſs it, as to a Gentleman of your ſuperiour Wiſdom and Experience in the learned Arts and Sciences?

It has always been my Opinion, that Books in any Art or Science, are moſt properly inſcrib'd to thoſe Perſons, that are conſummate Judges of the Subject we treat of: And your profound Knowledge and Experience in the Faculty of Phyſick, perfectly enables you to make an exact Judgment of the Treatiſe I tender to your Conſideration.

The Office of a Phyſician, Sir, is an Office of Truſt, and that as high as can be conferr'd from one Man to another: For what avails the largeſt Eſtate, or the moſt pompous Affluence, to him, that for want

want of Health cannot reliſh the Pleaſures, Satisfactions, and Enjoyments, they afford him?

A Crown, a Diadem, or the Royal Purple, are vain, uneaſy, and inſignificant Ornaments, to the moſt potent Prince languiſhing under a Fever, or diſtreſs'd with the raging Torture of the Gout.

In this, therefore, does the noble Art of Phyſick excel all other Arts and Sciences, as it is converſant in Relieving the perſonal Infirmities of Mankind, under their greateſt Diſtreſs and moſt deplorable Circumſtances.

To do Good, to relieve the Sick, and adminiſter Eaſe to the afflicted and miſerable, are Characters that ennoble the Soul, immortalize human Nature, and, according to the

Sentiments of our great Master * *Hippocrates*, lifts him up to an Equality with the Gods.

THE Honour, Sir, of the Profession, is not a little advanc'd by those Kings, Princes, and Philosophers, that either themselves have writ upon the Subjects of Medicine, or at least very much favour'd the Professors. That excellent Composition of *Mithridate*, was so call'd from *Mithridates* King of *Pontus*, its first Inventor: *Mesue*, Son to *Abdalus*, King of *Damascus*, compos'd the *Philonum Persecum*; *Sabor*, King of the *Medes*, records several Medicines; and *Avicenna*, that great Master of Physick, was an *Arabian* Prince.

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* Medicus enim Philosophus Deo æqualis habetur. *Lib. de decenti Habitu.*

NOT,

NOT, Sir, that I am wholly confin'd to these Instances of Antiquity, in favour of the Profession; For we have several Personages, in our own Kingdom, of the most illustrious Rank of Nobility, that very lately have been pleas'd to do Honour to the Profession, by taking up a Doctor's Degree in the Faculty of Physick.

AND it must be confess'd, Sir, even by those that are greatest Enemies to the Profession, that the wonderful Mechanism discoverable in the curious Structure of a human Body; the Consent, Agreement, and Harmony, of its several Motions, are Subjects of that sublime Nature, as may well engage the Study and Attention of the highest Mortal upon Earth.

THAT

# DEDICATION.

THAT you may long live the Ornament of both these Royal Societies, in which you so eminently preside, and share the Character of the great *Hippocrates*, who was not more illustrious for his profound Learning, than his Virtue, Humanity, and Benevolence towards Mankind, is the sincere Wish of,

*SIR,*

*Your most Obliged,*

*and most Obedient,*

*Humble Servant,*

Nicholas Robinson.

# THE PREFACE.

OUR *great Master* Hippocrates, *in the Beginning of his excellent Book of Aphorisms, lays down a short, concise, but most comprehensive Sentence, as a Preface to that judicious Work*; Vita brevis, Ars vero longa: *The Sense of which, as I understand it, is, That Life is short, and the Compass of Time very unequal to compleat a Physician, in the several Branches of his Profession. For after he has studied the Principles of Natural Philosophy, gone thro' all the Experiments necessary to compleat him in the Knowledge of natural Bodies, he is still to begin his Enquiries as a Physician.*

*THE Ancient Physicians, always solicitous for their Success in Practice, grounded their Theories of Physick upon the Maxims of Philosophy then most generally receiv'd; but as their Systems were for the most part void of a rational*

*Foun-*

*Foundation, so could they afford but little Certainty, in a Practice founded upon such precarious Principles.*

*I need not determine which of the Ancients is preferable, since* Hippocrates *has justly born the Sway thro' all Ages, and doubtless ought to be read with Diligence, by all that intend to be Proficients in the Practice of Physick; for, like* Milton, *the more he is understood, the more he charms us with the Justness and Sublimity of his Sentiments. And after* Galen, *all the rest were little better than Copiers, and some of 'em but indifferent Transcribers, from the Copies of these illustrious Originals.*

*THE Moderns, therefore, since the Improvements of Natural Philosophy, and Discovery of the Circulation of the Blood, must have more certain Grounds to go upon; and it can be imputed to nothing but the most stupid Negligence, if, assisted with these superior Lights, we do not over-top the Ancients, in all the Branches of the Arts and Sciences, and arrive at greater Perfection in their Practice, than could possibly be expected from them, under that Night of Darkness, in which they were involv'd.* AND

*AND I am fully perſwaded, were Men to employ more of their Time in the Study of Nature, the Conſtitution of human Bodies, and leſs in their Pleaſures, that every Century would raiſe up more* Ariſtotle's, Hippocrates's, Newton's, *and* Sydenham's, *than what the ſeveral Ages paſt have been able to boaſt of.*

*THE Capacities of Men are generally the ſame in all Ages, but moſt of us, it's to be fear'd, are cramp'd in the firſt Grounds of our Education: We get ſuch an habitual Tincture of Pleaſure in our earlieſt Age, as ſcarce ever after ſuffers us to purſue thoſe toilſome, laborious Studies, neceſſary to make us perfect Proficients in the Arts and Sciences.*

*NOR can I, after the beſt Obſervations I have been able to make, come into the Sentiments of thoſe Gentlemen, who are of Opinion, that a Phyſician, like a Poet, is born ſuch, not made; and the Principles of Phyſick, like the Principles of Poetry, interwove with the Conſtitution, not acquir'd by Labour and*

*Stu*

*Study: For though a Genius may be naturally inclin'd to Physical Enquiries, yet, without very great Application, he never will be able to make any considerable Figure, in the Practice of his Profession.*

*AND* Horace's *Exhortation to the Modern Poets of his Time, is very applicable to my present Purpose.*

——— Vos Exemplaria Græca
Nocturna versate Manu, versate diurna.
Lib. de Arte Poetica.

*SO that even Poets, as he very well observes, who have the best Title to innate Principles, must labour Night and Day in the* Greek *Fathers of Poetry, if ever they expect to reach the Sublime, and adorn their Writings with all the Elegancies and Beauties of the Ancient Bards.*

*AND I lay it down as a Principle, grounded upon the most evident Maxims of Truth, that whenever a Genius of the most elevated, natural Capacity, lets go any Opportunities of Improvement, he will*

*will certainly come behind those, that are inferior to him in natural Endowments, but who are his Superiors in Knowledge, only from their indefatigable Application to those Arts, their Minds naturally led them to the Study of.*

*NOW, to turn the Thread of my Discourse to the Subject under Consideration; I am not insensible, that many Objections may be rais'd against several Points, in the first Part of this Treatise; as that they either have a very remote Dependance on these Diseases, or at least are not of that Consequence, as to deserve a particular Explanation.*

*BUT these Objections, I readily perceiv'd, must arise from our not attending to the Nature of these Diseases, their several Symptoms, and the Chain of Causes that support them upon the Constitution: For as the Organs of all the Senses are often disconcerted under the Spleen and Vapours, how was it possible to treat of these different Symptoms, without first taking notice of the Manner, how the Organs are naturally affected, in letting in their proper Objects upon the Mind.*

THESE

*THESE Considerations, at once led me into an exceeding spacious Field of Reflection; and I found my self obliged to range through all the principal Subjects of Natural Philosophy: To consider the Nature of Vision, the Doctrine of Sounds, and the Faculty of Touch; what the Objects are in themselves, in the Organs of Sensation, and in the Mind perceiving their Affections.*

*ALL these several, particular Points were necessary to be consider'd, before I could proceed to discover what Changes, in the Motions of the Fibres, were necessary to produce these Alterations in the Mind, we most commonly perceive to affect us under the Spleen, Vapours, and Hypochondriack Melancholy.*

*IN Treating of these several Subjects, I readily perceiv'd, that the very Entrance was surrounded with thick Darkness, the Path all along beset with many Thorns, and the subject Matter it self obscur'd with the most intricate and perplexing Difficulties: Neither could I discover any Glimmerings of Light, from the*

*the Footsteps of former Authors upon these Subjects, that I could safely rely upon, to direct me in the Way of these Enquiries.*

*BE it, therefore, that I have err'd; that some Things are weakly treated of; others, perhaps, not sufficiently clear'd up; and several Points left doubtful in their Explanation: Of all these several Particulars, I am my self extremely sensible; but hope there are no Errors, that are not excusable by Men of Humanity; no Faults but what Persons, not wholly given up to Arrogance, or a Spirit of Resentment, may easily pass over; no Mistakes, or Over-sights, but what a candid and friendly Reader (if he seriously reflects upon the arduous Task I have undertaken) will easily be prevail'd upon to pardon.*

*DISSERTATIONS upon the Reason, Understanding, and other Faculties of the Soul, which take up most of the first Part, are Subjects that baffle the nicest Searchers into Nature, and which, by the greatest and most learned Philo-*

*sophers,*

*ſophers, have ever been acknowledg'd moſt difficult to handle.*

*THEY, indeed, afford the higheſt Pleaſure to Gentlemen endu'd with a fine Taſte for Enquiries of this ſublime Nature: And I am perſwaded, that a Perſon, of the meaneſt Capacity, will with Pleaſure be able to read the ſtrong Lines, I have drawn of this immaterial, unchangeable, and immortal Part, the Soul.*

*TO conclude; I only intreat the Courteous Reader, as my Affairs would not always permit me to viſit the Preſs, that he would make favourable Allowances for human Infirmities, leſſer Errors and Miſtakes, which, in ſo great Variety of Argument, on ſo very nice and difficult Subjects, might not unreaſonably be ſuppos'd to eſcape the greateſt Care.*

Warwick-Court, *in*
Warwick-Lane,
Dec. 6. 1728.

# A NEW SYSTEM OF THE SPLEEN, VAPOURS, AND *Hypochondriack* MELANCHOLY.

## PART I.

## INTRODUCTION.

TO ſearch after Truth, to examin former Opinions, and weigh every Sentiment, with the greateſt Exactneſs, in the Balance of Equity, are the moſt generous Characters, that diſtinguiſh a truly noble Soul.

An unbiaſs'd Mind the ſureſt Guide to diſcover Truth and Knowledge.

PART I.

In this Conduct, all Virtue, Learning, and Knowledge are intirely comprehended; and once a Man is arriv'd to that Evenneſs of Temper, that he can relinquiſh his darling Notions, when they appear not grounded on the Laws of Nature, he certainly is in the high Road to that invaluable Bleſſing, Knowledge, that elevates one Man above another, and diſtinguiſhes all of us from the brutal Parts of the Creation.

I attempted, in my *Treatiſe of Conſumptions*, to account for all the various Appearances of Diſeaſes, that exert their Tyranny within the Compaſs of the circulating Fluids, from the ſlighteſt Decay to the moſt confirm'd Phthiſis, from the mechanical Affections of Matter and Motion: I ſhall now proceed to examin into the Nature, Cauſe, and Cure of thoſe that attack the animal Powers, and diſconcert the noble Endowments of the rational Faculties, in order to compleat a new Syſtem of Phyſick and Diſeaſes.

INTROD.

The Difficulties, that attend this Subject, arise from the Obscurity of its Ideas.

IN attempting a *Treatise upon the Spleen*, I readily perceiv'd, that I had got into a Scene of Nature, where it was highly difficult to discover the least sure Footing, where most of the Phænomena that concern this Enquiry are deeply entrench'd in impenetrable Darkness, and where the Nature of the Subject it self scarce admits of Evidence, much less Demonstration.

What is to be done, where we cannot attain to Demonstration.

HOWEVER, in the Prosecution of this System, I shall endeavour to plunge as deep into the metaphysical, abstruse Mysteries of Matter, Thought, and Motion, as the Nature of these several Points will admit; and there content my self with the most seeming Probability, where I cannot discover demonstrative Evidence, which will then be supported upon the surest Grounds, if it contain no obvious Contradiction to the Laws of Nature.

FOR there is a regular Fitness, in the Nature of Things, that compose the Universe, whereon the Relations of all

PART I. their Ideas are ſupported, even from the firſt Principles down to the ultimate Concluſions, tho' infinitely remote: The intermediate Ideas are all thoſe Objects, by whoſe neceſſary Connexion we diſcover the ſeveral Links of the Chain, that hold the firſt Principles of Nature connected with the ultimate Concluſions; and by which we diſcover that Chain of Conſequences, that make up the Beauty, Order, and Harmony of any Subject.

How to purſue our Diſcoveries of Knowledge in the moſt abſtruſe Points.

THE right Way, therefore, of purſuing our Diſcoveries of Knowledge, is to lead the Mind, by gradual and eaſy Steps, from ſelf-evident Theorems, into the moſt abſtruſe Myſteries of Nature and the Sciences, where the ſeveral Ideas, that expreſs the Nature of any Subject, all depend on each other, in a Chain of Conſequences, ſupported upon an eaſy and natural Connexion.

What Knowledge is.

Now the Knowledge we acquire of any natural Phænomenon, is only the Diſcoveries we make concerning the Relation it bears to that Scheme of Beings,

ings, that adorn the Univerſe; and ſo far as we can diſcover the inſeparable Habitudes and neceſſary Connexion of its Ideas, ſo far, and no farther, can we diſcover certain Truth and Knowledge.

A twofold Knowledge of Nature neceſſary.

THERE is a twofold Knowledge of natural Beings; the one intuitive, the other experimental; the firſt relates to the Diſcovery of new Ideas or Objects, that were before unknown to the World, the other concerns the neceſſary Connexion or Arrangement of their Properties, and the Powers they have to alter, change, and affect other Bodies in the Univerſe: Our intuitive or perceptive Knowledge, becauſe it ariſes from an immediate View of the Objects, depends on Travel; our experimental Knowledge, on the Diſcovery of the Properties of thoſe Objects.

*SENECA* was ſo ſenſible, that this latter was a real Part of Knowledge, that he takes particular Notice of it in his ſixty fourth Epiſtle, in theſe Words, *Etiamſi omnia a veteribus inventa ſunt, tamen erit hoc ſemper novum,*

PART I. *uſus & diſpoſitio inventorum ab aliis.*

The Knowledge of any Object, and its Properties different.

HE, therefore, as this great Philoſopher very well obſerves, that, by his ſuperior Skill, has render'd a Science more clear and intelligible, by a proper Arrangement and diſtinct Explication of its ſeveral Branches, though he has ſaid nothing new, as to the Matter, that was not ſaid before by others, yet certainly is a real Benefactor to Mankind.

A VERY familiar Example will let this Point more clearly into the Mind. He that diſcover'd that noble Remedy we call the *Jeſuit's Bark*, but remotely diſcover'd a Bleſſing that has reſcu'd Thouſands from the Jaws of Death; but he that diſcover'd the certain given Circumſtances, in which it might always profit, but never could hurt human Bodies, certainly was a more extenſive Benefactor to Mankind, than he that firſt ſent it over to *Europe*, with this general Character, that it was a moſt excellent Specifick in all Agues and intermittent Fevers, but, at the ſame Time, could

give

give no Information of the particular Circumſtances, in which it might ſafely be given.

HENCE the Diſcovery of the Thing itſelf was but of little Conſequence to the Generality of Mankind; but the Diſcovery of the Connexion its Corpuſcles had with human Conſtitutions, whereby it cur'd periodical Diſeaſes, was the real and only Benefit, and for which the Author merited the higheſt Acknowledgments from the reſt of his Fellow-Creatures.

Travel the propereſt Means to improve our intuitive Knowledge; Experiments, our rational Knowledge.

AND as Travel is the propereſt Means to enlarge our Ideas, ſo Experiments concerning the Properties of theſe Objects, is the only Way to improve our rational Knowledge. Both theſe Requiſites are abſolutely neceſſary to him, that would make any conſiderable Advances in the Study of Nature; for that Knowledge muſt needs be contracted, and narrow, while only confin'd to the Objects of his own Country; and therefore he that has confin'd his Views of Men and Things to his own City or Village,

PART I.

lage, will have fewer Opportunities of enlarging his Knowledge, than he that has rang'd through a Province; and he ſtill fewer, than he that has ſeen the diſtant Boundaries of a ſpacious Empire; and he ſtill fewer, than he that has travell'd through divers Parts of the World: But this Remark I only intend to be underſtood of Perſons that travel for the Improvement of their Knowledge, not for the Indulgence of their Vices; ſeeing that theſe may be ſaid rather to travel for the Improvement of Ignorance, than the Diſcovery of uſeful Knowledge.

Whence our Miſtakes and Errors.

YET, after all our accurate Diſcoveries, and beſt Attainments, we daily fall into groſs Miſtakes, which ariſe not ſo much from a neceſſary Error in our Judgment, as the Imperfection of our Organs, while the Soul is chain'd down to the Conduct of the Senſes; but ſtill he is the wiſeſt Man, that arrives to the greateſt Perfection in this Knowledge of himſelf, and of human Nature, that his Faculties are capable of: Than this, God and Nature requires no more at our Hands.

AND

AND here I beg Leave, once for all, to forewarn the Reader, that he do not expect ſtrict Proofs for all the particular Points I ſhall handle in the enſuing Diſcourſe; for he will have Reaſon to be abundantly ſatisfied if I treat of theſe ſeveral abſtruſe Subjects in a Way more familiar to the Mind, than what has hitherto been taken Notice of, and which will ſerve greatly to illuſtrate the Nature and Cauſe of the ſeveral Diſeaſes I ſhall conſider in the enſuing Diſcourſe.

When, and when not, to attempt Demonſtration.

DEMONSTRATION we ought never to attempt, where the Subject is either above the Reach of our natural Capacities to comprehend; or where we can diſcover no viſible Connexion between the Ideas on which we would ground the Certainty of our Proofs; as certainly we cannot, concerning the Ideas that ſupport the Juncture of Matter and Thought, and from what wonderful Cauſes it ariſes, that Matter and Motion ſhould obey the Determination of the Will.

OUR

PART I.

OUR Ignorance, I ſay, of the Manner how this Juncture is ſupported, that is, how the Body works upon Thought, and Thought upon Matter, will ever render us liable to great Uncertainties concerning the real and immediate Cauſes of Pleaſure and Pain, or how thoſe different and oppoſite Senſations are produc'd, from the ſame Inſtruments, in animal Bodies; and as the ingenious Author of the *Diſpenſary* elegantly expreſſes it:

*How the ſame Nerves are faſhion'd to ſuſtain*
*The higheſt Pleaſure and the greateſt Pain.*

Probability muſt ſupply the Place of Demonſtration, where that cannot be had.

IN Points, thus far lying beyond the Reach of our natural Faculties to comprehend, the higheſt ſeeming Probability muſt determine our Aſſent, which will always give way to the Force of thoſe Arguments, that are grounded upon Reaſons moſt evidently prevailing.

The Manner of treating the Spleen, Vapours, and Hypochondriack Melancholy.

Now, in order to give the Reader the cleareſt View of the Manner how our Thoughts often, under nervous Diſeaſes, ſtart from a regular Turn of Thinking, into ſtrange and ridiculous Whims and Fancies, I ſhall in this firſt Part offer ſome Conſiderations touching the Nature of Thought, and the Structure, Mechaniſm, and Modulation of the Nerves, neceſſary to produce Senſation, and tranſmit the Ideas of all ſenſible Objects to the Underſtanding. After this, I ſhall, in the ſecond Part, attempt to diſcover how the Nerves ſerving the ſeveral Senſes abate of their proper Stricture, and infer thoſe Diſorders, in the Animal OEconomy, we call the *Spleen*, *Vapours*, and *Hypochondriack Melancholy*; and laſtly, in the third Part, ſhall obſerve the moſt general Rules and Methods, in order to reſtore the impair'd Tone of the Nerves, to their regular Standard, whereby the intellectual Faculties will recover their regular Action of Thinking again.

PART I.

THE Deſign of the following Treatiſe is to ſet all theſe ſeveral Particulars in the cleareſt Light their abſtruſe Natures will admit; in the Proſecution of which Subjects I ſhall endeavour, as far as I am able, to bring down the lofty and ſublime Myſteries of Matter, Thought, and Motion, to the Level of the meaneſt Capacity. To which End and Purpoſe I ſhall diſcard all hard Words, puzzling Terms, and harſh Expreſſions, that only ſerve to embarraſs the Readers Thoughts, and ſpoil the Periods of the brighteſt and moſt beautiful Connexions.

BUT, alas! what Lights ſhall I lay hold of, that may ſafely guide me through the dark and intricate Mazes, that lead up to the Soul's Reſidence? or how diſcover the Partition Line, that determines the myſterious Boundaries between the Ending of Matter and Beginning of Thought? or diſcloſe where exiſts that moſt ſubtle Medium, that holds theſe two diſtinct Subſtances, ſo cloſely united, that nothing but Death can diſſolve the Juncture?

ture? Theſe are Points moſt abſtruſely myſterious, and pois'd with Difficulties, I eaſily perceive, will demand the Aſſiſtance of a ſtronger Brain than mine to untie.

In Philoſophical Enquiries our Reaſon is to ſupply the Uſe of the Senſes, when the Object is above their Reach.

BUT, though theſe Speculations may contain Matters infinitely exceeding the Reach of the moſt enlarged Capacity to comprehend, and which perhaps are not comprehenſible by us in this imperfect State; yet to me it ſeems greatly abſurd, to think, that we ſhould limit the Boundaries of our Knowledge to the Diſcoveries of our Senſes only: Certainly our Reaſoning Faculties were given us to aſſiſt our Inquiries in the Purſuit of Objects, when either through their Minuteneſs or Remoteneſs they ceas'd to diſcover themſelves to the Senſes. We know certainly, though we ſee not, that the Corpuſcles of Matter in their ultimate Diviſions impell, reſiſt, and divide each other, in the ſame Manner as they did in the greater Veſſels, and that the three grand Principles of Nature, *viz.* Figure, Impulſe, and Motion, are the ſame, whether we perceive them by the naked

PART I. naked Eye, by Microſcopes, or Reflection.

BUT if it be objected, that theſe Principles are inſufficient to give us a juſt Idea of the Points in Queſtion; I anſwer, that they being the genuine Laws of Nature, if rightly employ'd, will let in, upon the Mind, all the Light and Knowledge that are neceſſary to our State and Condition, and will ſerve much better the Ends of Philoſophical Enquiries, than any fanciful Hypotheſis, how artfully ſoever contriv'd, yet handed to the World.

## CHAP. I.

### *Of the different Principles of human Bodies, in Relation to the different Conſtitution and Genius of Mankind.*

The Motions of human Bodies conducted upon the ſame Principles, that ſupport the Syſtem of this Univerſe.

I Have, in a former Treatiſe, endeavour'd to prove, that theſe Bodies of ours are conducted upon the ſame Laws, that ſupport the Motions of this huge

huge Frame of Nature, and that all their Phænomena, whether under a State of Health or Diſeaſes, are diſcoverable from the Principles of Attraction, Motion, and Diviſion; and therefore, in order to apply theſe Principles to the Structure and Mechaniſm of human Bodies, and ſupport the following Syſtem upon the cleareſt Evidences of Truth, I ſhall beg Leave to aſſume theſe ſeveral following Propoſitions, as fundamental to the enſuing Diſcourſe.

THAT every Individual neceſſarily receives a peculiar Conſtitution from his Parents, that ariſes from the firſt putting together of all the Fibres, joining in one common Mechaniſm; by which the ſeveral Organs are ſupported in their Motions.

THIS mechanical Syſtem of Matter receives Life from its Motions reſulting from the Harmony of the ſeveral Fibres, that conſtitute the Members of the organiz'd Machine, of which the Heart is the principal Spring.

PART I.

SENSE and voluntary Motion it receives from fine Threads or nervous Fillets, that either immediately hold of the Soul their ſeveral Senſations, or at leaſt of the common Senſorium, which I take to be the Seat or Reſidence of that Thinking Being, that reſides thus ſurprizingly within us.

ITS natural Motions are owing to the different Degrees of Elaſticity or Springineſs, that the Fibres of the Body are naturally endu'd with; and which conſtitute thoſe different Habits, that are perceivable in different Individuals.

THIS different Elaſticity of the Fibres, by which the Motions of the Conſtitution are varied, exalted, and depreſs'd, ariſes from the different attracting Principle in the Corpuſcles that originally compoſe thoſe Fibres, whereby they are differently intended or remitted with a greater or leſſer Spring or Impulſe.

THE Body, thus conſtituted or ariſing into Being, is ſuſceptible of divers Motions,

tions, inducted from the different Degrees of Elaſticity, that the Solids of one Individual obtain above another, which are the Cauſes of all thoſe Changes and Alterations the Conſtitution ſuffers from, whether under a State of Health or Diſeaſes. 

BUT leaſt, that, according to this Syſtem, there ſhould be as many different Conſtitutions, as there are various Degrees of Motion in different Individuals, or different Complexions among Mankind; it pleas'd the Antients to reduce that infinite Variety of Conſtitutions dependent on thoſe various Motions, under four diſtinct Claſſes, which they term'd the hot, the dry, the moiſt, and cold Temperatures; and to which they ſubjoin'd four Humours, that correſponded to thoſe ſeveral Temperatures, as they more or leſs prevail'd in the Conſtitution; and theſe they call'd the ſanguine, bilioſe, phlegmatick, and melancholy Humours.

Now, that theſe ſeveral Principles, as they reſpected the Qualities as well as Humours of the Body, were dependent on the greater or leſſer Degrees of Mo-

PART I.

tion, is evident; for by increasing the Beating of the Heart, you evidently alter the prevailing Quality, and consequently the Humour depending on that Quality; so that the Difference of Constitutions is much more clearly grounded on the different Elasticity of the Fibres, whereon those different Motions depend, that give those different Qualities; as also those different Humours to the Habit, whereby the Constitution is denominated hot, dry, moist, or cold; and the Complexion of a sanguine, bilious, phlegmatick, and melancholy Temperature: For certain we are, that the Complexion is diversified, not only from the different Features arising from the different Position or Arrangement of the Fibres or Muscles, but from the different Motions inducted from the different Elasticity of the Fibres; which different Elasticity arises from the different attracting Principle lodg'd in the * *Machinulæ* that compose those Fibres.

* *Machinulæ* are little small Corpuscles of Matter, that vary their Distance and Motion in every Contraction or Distraction of a Fibre, Muscle, or Organ.

Now the bilious Constitution, *cæteris paribus*, always arises from the highest Degree of Elasticity in the Solids, which infer the highest Degree of Dryness in the

the Habit; upon which the Blood of theſe People is always impregnated with Plenty of Salts; whereby they are ſtrongly inclin'd to gratify their Paſſions; and for this Reaſon they are naturally ſubject to the Gout, Stone, and Gravel, becauſe their Solids are capable, from their quicker Impulſe, and ſtronger Impreſſions on the contain'd Fluids, to extract a greater Proportion of Salts from the Blood, than is poſſible in Conſtitutions, whoſe Solids are not endu'd with the ſame Degree of Elaſticity.

Of the Genius reſiding in the bilioſe Conſtitution.

THE intellectual Faculties of the Mind reſiding in this Conſtitution, is always lively, vivacious, and abounding with that ſublime Wit, that often, in its towering Flights borders upon Phrenſy; and this is the Reaſon why Perſons of ſingular Thoughts are often ſuppos'd to have a Tincture of Madneſs in their Compoſition, which often ariſes only from Want of Judgment in their Accuſers. However, the Difference between ingenious Perſons that are mad, and thoſe of this elevated Caſt of Mind, is, that the Diſcourſes of the former are ir-

PART I. regular, and frequently broke off by incoherent Starts; while a regular Chain of Sentiments is deliver'd by the other in the ſublimeſt Strains, and which is above all human Thought to ſoar, not aſſiſted with this natural Temperature of the Solids.

THE ſanguine, though more level in its Flights, yet generally is ſolider in its Conceptions. This Temperature depends altogether on the Impulſe of the Heart and Arteries, which are leſs elaſtick than under the former Conſtitution; ſo that the Blood only obtains ſo much Motion, as may divide it to a juſt Degree of Fluidity, not ſo much as in the bilioſe, tho' rather more than under the phlegmatick Conſtitution. This is the moſt happy Medium of the Habit, in which the Fluids are moſt exactly mix'd to reflect the Rays of Light tinctur'd with red, which diſcovers to us that Floridneſs of the Complexion in Perſons endu'd with a delicate Texture of Skin.

In the Sanguine.

UNDER this Temperature, although the Mind is capable of exerting leſs of that

that flashy Wit, yet it obtains a more noble and solid Way of Thinking, and is fitter for the Discoveries of experimental Knowledge, because it dwells longer upon the Contemplation of sensible Ideas, by reason that the succeeding Impulse is not strong enough to abate the Attention, unless the Object strike the Mind with some Idea very surprizing.

Of the Genius residing in the phlegmatick Constitution.

THE phlegmatick has for its Support a lesser Degree of this Elasticity, or Springiness of the Fibres; whereupon all the Impulses are weaker, the Motions and Secretions of the several Juices slower, and consequently the Heat less discoverable, than under either of the foregoing Habits. People of this Complexion are generally less ready in apprehending Objects offer'd to any of the Senses; but what they do conceive, they most commonly retain, and improve upon the Inventions first discover'd by others.

Of the distinguishing Characters between the *English* and *French*, in relation to their different Genius.

WERE I permitted to give my Opinion, concerning the different Inclinations observable between the People of the *French* and *English* Nations, in re-

PART I.

lation to the Improvements of the Arts and Sciences, it ſhould be, that the *French*, being generally more bilioſe in Habit, are more ready at Inventions, from the Quickneſs and Changeableneſs of their Tempers, that ſeldom ſuffer them long to dwell upon any one Object; but that the *Engliſh*, being of a ſlower Temperature, are fitter for Improvements, which demands a deeper Attention to the Ideas of thoſe Objects they would improve upon.

In the melancholy Temperature.

WHAT the Antients call'd the melancholy Temperature, is only a greater Degree of the phlegmatick. In melancholy Conſtitutions the Complexion is naturally ſallow, dark, and gloomy; they are of a faded ſaturnine Aſpect, which is a ſure Indication that all the Motions are depreſs'd beneath their natural Standard. You may perceive often, in the Countenances of ſuch People, ſtrong Symptoms of a labouring Imagination; they revolve long upon the ſame Ideas; and if the Objects be of the dejecting Kind, and attended with great Loſſes or Diſappointments, they ſtrike deep

deep into the Soul, and croud the Fancy with deſpairing Thoughts. People incident to this Conſtitution, naturally, upon the Decline of Life, fall into the Hypochondriack Melancholy, if they have not a Tincture of it before. 

THESE foregoing Temperatures often receive a Mixture in the original Frame of the ſame Conſtitution; from whence ariſe the different Degrees of Wit and Judgment in the ſame Habit; and this is the Reaſon, why we ſometimes perceive ſuch a ſurprizing Difference in the Genius of the ſame Perſon, and why ſome are extremely witty and extremely dull, both in their Writings and Converſations, at certain Seaſons, as the bilioſe or phlegmatick Temperature happen more or leſs to prevail.

## CHAP. II.

### *Of that Spiritual immaterial Principle we call the reaſonable Soul.*

THE foregoing Temperatures are only the different Affections of Matter and Motion, that differently modulate the Action of this immaterial Being, whereby it produces different Degrees of Wit, Genius, or Stupidity in different Individuals; and therefore, in order to diſcourſe with the greater Clearneſs concerning the Principles of human Nature, I muſt entreat the Reader's Favour, to aſſume for certain, what he will perceive ſupported upon the moſt evident Reaſons in the Sequel of this Diſcourſe, *viz.* That every Individual obtains a ſpiritual Principle, that conſtitutes that immaterial Subſtance we call the reaſonable Soul, and which, by the Aſſiſtance of certain Powers, is capable of exerciſing the ſeveral Faculties of Underſtanding, Reaſon, and the Memory, in

Every human Individual has a ſpiritual immaterial Principle we call the Soul.

in certain given Circumſtances. I chuſe to expreſs the Exerciſe of thoſe Faculties by the Terms; *in certain given Circumſtances*, becauſe their Actions are limited, and depend on the regular Influence of Matter and Motion, while the Soul is oblig'd to animate thoſe organiz'd Machines. CHAP. 2.

THIS ſpiritual, immaterial Being, as far as we can diſcover any Idea of its Action in this imperfect State, is a Power within us, by which every rational Individual perceives Things to be what they are; by which he abſtracts, compares, and draws Inferences and Concluſions from Premiſes, according to the Relation, Agreement, or Diſagreement that different Objects bear to each other. But here a Queſtion very fitly may ariſe, *viz. What is it that thinks and ſets the human Species thus far above the Level of all other animated Parts of the Creation?* And this I take to be the human immaterial Spirit, which is a Power diſtinct from Matter and Motion, as will appear to any one, that, with Attention, conſiders the following Arrangement of

their

PART I. their different Attributes, Habitudes, and Affections.

BY the cleareſt Reflection, we perceive, that this noble Creature Man conſiſts of two Parts, Matter and Thought, or Soul and Body, evidently diſtinct in all their Operations, though both ſubſiſt under the ſame Form, and jointly conſtitute that Eſſence, that denominates him a rational Creature.

Of the diſtinct Operations of Matter and Thought.

THE Mind can reaſon, act, and think without any Aſſiſtance from the Body; nor can we conceive how the fineſt Fibres, the pureſt Blood, or moſt exalted Spirits, can ever inſpire theſe Bodies of ours with Thought, Reaſon, and Reflection; they are foreign to a Capacity of Thinking, and as diſtant from Reflection as the very Bones that ſupport the Machine, though ſubtiliz'd to the higheſt Degree of Spirituality by all the Proceſſes of Nature.

AGAIN, Can the Mind ſtop the Circulation of the Blood, retard the Beating of the Pulſe, or obſtruct the Motion

tion of the Nerves, although natural to Matter and Motion? Once more: The Mind contrives, forms, and intends this or that, juſt as it pleaſes, without any Information from the Body, and drags thoſe heavy Carcaſſes in Obedience to the Will's Direction, without the leaſt Aſſiſtance from thoſe paſſive Machines. Laſtly, the Body digeſts, aſſimilates, and nouriſhes, without any exerted Thought of the Mind to command theſe Operations; and ſickens, pines, and dies, not only againſt, but in Oppoſition to the Powers of the Mind to withſtand theſe Accidents. 

I therefore define the Soul, in relation to its purely ſpiritual or immaterial Nature, a ſelf-moving Principle, capable of producing divers Thoughts and Motions in a Syſtem of Matter, properly modulated, to be directed by its Impulſe.

So that I may ſafely venture to lay it down as a fundamental Poſtulatum, *viz.* That Thought can move Matter ſo prediſpos'd by the divine Power, as to be capable

PART I. capable of being influenc'd by the Direction of the Will; but what kind of Mechaniſm or Arrangement of Corpuſcles is neceſſary to make up a Syſtem of Matter to be directed by Thought, or the Influence of the Will, is a Queſtion that, I muſt confeſs, puzzles my Philoſophy, and can only be reſolv'd by the ſupreme Author of Nature, who has thus fearfully and wonderfully made us.

THESE different Effects, ſo viſibly perceivable in Matter, Thought, and Motion, will plainly ſupport the Idea of different Exiſtences, and conſequently of different Subſtances, that is, it will be impoſſible to conceive how ſuch different Effects can ever ariſe from the ſame organiz'd Body, independent of an immaterial Subſtance.

WHATEVER, therefore, the Mind be, of this we are certain, that it can move the Body; that it can direct its Operations, and conduct it from Place to Place; and at the ſame Time is conſcious, that it accompanies it through all theſe different Changes.

WE

WE perceive further, by Experience, that the Soul ſees through the Eyes, hears through the Ears, and is capable of being affected with Matter and Motion from thoſe Objects, that are apply'd to the Surface of the Body.

IT is true, we cannot conceive the *Modus operandi*, that is, how Thought can work upon Matter, or Matter upon Thought; but we very well know, that a diſorder'd Body will make a diſorder'd Mind; and *vice verſa*, God Almighty, our ſupreme Author, having ordain'd, that the Affections of the Body ſhould accompany the Mind through all the various Scenes of Pleaſure and Pain, Joy and Grief, while the Soul is confin'd to this Globe.

THESE little Spots of Earth, human Machines, to which we are chain'd, while the Soul is oblig'd to animate theſe corporeal Organs, are the Cauſe why we cannot diſcover the Nature of this ſpiritual Being, and why its moving Power is ſo greatly ſuſpended in its Action; but were it once unfetter'd from the Bondage

PART I. dage of these Shackles, it would naturally rise, and take its Seat in the proper *Ubi* of this immense Theatre, ordain'd the happy Mansion of Spirits, by the Sovereign Director of the Universe.

THAT the Soul is impassable, and consequently incapable of Change, was the Doctrine of our great Master *Hyppocrates*, and afterwards confirm'd by *Aristotle*, who taught, that all the Changes that happen to the Individual, arise from divers Affections of the bodily Organs; which oblig'd the foresaid great Man to declare, that were it possible to inoculate the Eye of a young Man into the Optick Orbit of an old Man's Head, and give it all the Motions of the former, the old Man would see Objects with the same Vivacity and Clearness, that the former did; so that, according to his Doctrine, the Soul is the same in an Infant new-born, in a Person advancing in Years, in a Man turn'd of Fourscore, that it is in a Body coming to its full Vigour and Strength. The bodily Organs, and especially those on which its Operations immediately depend, vary mightily,

mightily, by which the Exercise of its Faculties are lessen'd or improv'd; but in respect of its own particular Existence, it remains the same Being, that it is, impassable to the Laws of Matter and Motion. 

THE Capacity, therefore, and Improvements of the Mind, depend on the Powers of its Faculties, whose Exercise are more conspicuous, the more the finest Fibres of the Brain, in which they lie envelop'd, during the Infancy of our Being, dilate, unfold, and display their Action, which is the Reason, why the Ideas of Objects appear so faint and languid, and why we are so incapable of retaining any Store of those Ideas, that offer themselves to the Senses, in the first Years of our Childhood.

THAT the Improvements of the Mind depend on these favourable Opportunities, is demonstrable from constant Experience; for the Brain itself may be extremely finely form'd, both as to its Figure, Magnitude, and Consistence; the Organs serving the several Senses, exactly

PART I. exactly modulated for the Reception of Ideas; and yet no Improvements made, for want of Objects to enlarge our Knowledge upon; as is the Case of the poor *Indians*, that want nothing but Opportunities to render them equal to the most acute Philosophers in *European* Countries.

EVERY Body, that has convers'd with Mankind, must be sensible, that their Thoughts, Inclinations, and Capacities, are infinitely diversified; from whence their natural Genius's are differently impell'd to divers Applications and Studies: from whence, therefore, arise this Change and Variety? From whence, but from the same Causes that diversify their Complexions? And from whence this Diversity of Complexions, but from the different Motions of the Animal Fluids, which receive their Existence from the different Beating of the Artery.

HENCE it follows, that the Difference between the lowest, most abject, and the highest, most elevated natural Capacities, must depend upon the different Degrees of

of Motion coming to the Seat of the * common Sensorium, with a greater or lesser Impulse; for I firmly believe, that this spiritual Substance we call the Soul, under all the Pressures of the most violent Fever, under the severest Symptoms of the most raging Madness, and the highest Defects of the noblest Sensations, is the same Mind, the same Self, the same Ray of Divinity, that Almighty God infus'd, when he form'd it a living Soul; and whenever the Hand of his Providence is pleas'd to divest it of these Walls of Flesh, in which it is immur'd, it will arise the same immortal Being, it was before *Adam*'s Fall, capable of the same divine Knowledge, and of enjoying those everlasting Scenes of Happiness, our good God has promis'd to all those, that sincerely love and fear him.

* Vid. *Chap.* VII. of Sensation in general.

Of the unchangeable Nature of the Soul.

THE Instruments, it's true, by which this immaterial Being acts, are often so affected, that they seem to alter the Soul's Operations; but this Fault is intirely in the material Organs, that make wrong Representations of the Actions of her Faculties, through a mechanical

PART I. Force involuntarily put upon their Motions; the Will, at ſuch Times, not giving the leaſt Evidence of its Determination.

WHEN a Man laughs, ſleers, or ſcrews up the Muſcles of his Face, as in divers Paſſions, that ariſe from Anger, Joy, Grief, *&c.* the Soul neither cries, laughs, nor grieves; the Change is only in the Organs of the Muſcles and Fibres, that our Thoughts determine into thoſe different Poſitions to expreſs thoſe ſeveral Characters by.

ALL the Modes or Changes, that we can poſſibly conceive the Mind capable of, from thoſe Objects that affect it, are only Motion, Thinking, Pleaſure, and Pain; ſo that the Difference between an Idiot and the moſt enlarg'd Underſtanding, in relation to their different Capacities, I take to ariſe from the different mechanical Affections of Matter and Motion; their Souls are the ſame; both derive their Exiſtence from the ſame Fountain, and, according as their Bodies happen to be more or leſs perfectly organiz'd,

ganiz'd, they exert theſe Faculties in a more or leſs reaſonable Manner. And this is the Reaſon why thoſe Faculties are moſt vivacious and witty in the bilioſe, more ſedate and thoughtful in the ſanguine, dull and heavy in the phlegmatick, and moſt abject and penſive under the Preſſure of the melancholy Temperature.

So that, with Submiſſion to Mr. *Lock*'s Sentiments, concerning the Impoſſibility of rational Beings Thinking without perceiving it, there is a conſiderable Difference between the Signification of the Terms *Non eſſe*; and ; *Non apparere eſſe* ; for many Beings confeſſedly exiſt, that give no Appearance of their Exiſtence: And certainly the Soul loſes nothing of its Eſſence, when reduc'd, through the Indiſpoſition of its Organs, into the Condition of a Changling, tho' it is thereby render'd incapable of exerting thoſe Faculties of the Underſtanding, by which it apprehends its own Thoughts and Reflections.

The putting of Attributes for the Eſſences of Beings, very dangerous in Philoſophical Enquiries.

PART I.

THAT Gentleman, I am perſuaded, would make a conſiderable Difference between the Soul's Loſing its Capacity of Thinking, and its Power of exerciſing that Capacity: The former depends on its real Exiſtence; the latter on the Organs ordain'd by Nature for the Exerciſe of that Faculty; ſo that while it is confin'd to animate the Body, it only can exert theſe Faculties in certain given Circumſtances, and theſe Circumſtances depend on the regular Diſpoſition of the bodily Organs.

THE Perſonality of the Soul, therefore, has nothing to do with Conſciouſneſs, which is only a limited Attribute, dependent on the regular Exiſtence of this ſpiritual Being, capable of Thought and Reflection. Now Thought can no more be ſaid to be that ſpiritual, immaterial Principle we call Self; than Motion can be ſaid to be Matter, which is only a Power it is capable of being affected with: Self is a Term that marks out the Individuum of this ſpiritual Principle to a particular Exiſtence, whereby it is neceſſarily

neceſſarily related to Time, Place, and other Circumſtances, that concern that Being.

THE Term *Perſon*, therefore, muſt comprehend the real Exiſtence of that ſpiritual Being we call *Self*, and not be confin'd alone to Conſciouſneſs; for were the Non-Exiſtence of Conſciouſneſs neceſſarily to imply the Non-Exiſtence of Perſon, which muſt be the Caſe, if Conſciouſneſs conſtitute the Eſſence of Perſon; then every Time the Soul ceaſes to think, which is as often as it ſleeps without dreaming, the Perſon muſt neceſſarily ceaſe to exiſt, or be annihilated, and, conſequently, will demand a new Creation to put it into Being again.

Perſon a Being capable of Thought and Reflection, but is not Thought or Reflection themſelves according to Mr. *Lock*'s Principles.

Mr. *Lock*, therefore, is under a very great Miſtake in attempting to confound the Idea of Perſon with that of Conſciouſneſs, ſince the former is a real ſubſiſting Principle, and the latter only an Affection of that Principle, depending on the regular Exerciſe of the corporeal Organs. Conſciouſneſs, according to the niceſt, critical Senſe of that Word, is on-

Mr. *Lock* egregiouſly miſtaken in attempting to confound the Idea of Perſon with that of Conſciouſneſs.

PART I. ly Thought reflected upon, or a Perception that we do perceive; ſo that to diſcourſe upon Conſciouſneſs is the ſame as to reflect upon Reflection; for of thoſe Ideas only can we be ſaid to be conſcious, that we think upon with Attention, that is, that we redouble our Reflection upon.

WHAT it is that diſtinguiſhes the Individuum of the Perſon diveſted of the Exerciſe of its Faculties, I ſhall not pretend to determine; that being a Point above the ſublimeſt Imagination to conceive, and perhaps is impoſſible to us, in this imperfect State of Nature: But of this I am pretty well aſſur'd, that the Action of the Faculties are varied, exalted, or depreſs'd, from the different Modulation of the Brain and Organs that ſerve the ſeveral Senſes; and were the Matter that compoſes the corporeal Organs infinitely more ſubtle, the Motion of the Soul's Faculties, that is, its Thoughts, would be infinitely more active, more knowing, and penetrating, than what they poſſibly can be during its Confinement to thoſe groſs Compages

of

of human Bodies; and were it poſſible to conceive two Perſons, whoſe Texture of Organs were the ſame in all their Structures, Motions, and Configurations; their Senſations, Perceptions, and Reflections would not be different, upon Application to the ſame Objects.

THEY that are for grounding the neceſſary Exiſtence of Perſon upon the Exiſtence of Conſciouſneſs, argue after this Manner: Nothing can be intelligent, ſay they, any further than it has Thought; for that Thought it is, that diſtinguiſhes the Individuum of the Perſon, and marks it out to a particular Exiſtence: And to talk of an intelligent Principle void of Intelligence, is Nonſenſe; becauſe it is the Intelligence, that makes it an intelligent Principle; which Principle it can continue no longer than it preſerves its Power of Intelligence.

THIS Way of Reaſoning ariſes from our not diſtinguiſhing the Action of intelligent Beings from their ſpiritual Eſſence; and ſo we come to conſtitute the Faculties for the Subſtance of immaterial

PART I. Beings. Were the Eſſence, that ſupports the Reaſoning Faculty, extinct upon the Motions of a Fever, that often deſtroys the Appearance of Reaſon, it would be impoſſible to revive it again without a new Creation, which is a ſtrong Argument, that the Soul exiſts the ſame through all the Changes it ſuffers from the Affections of the bodily Organs, and is capable of exerting the ſame Power of Thinking, according as the Motions of the Humours ſubſide, ſettle, and return to their regular Standard again.

UPON theſe Grounds a Changling may ſupport the Idea of Perſon as well as an Individual, whoſe reaſonable Faculties are more regularly exercis'd, only the Perſon of the Changling will be leſs capable of exerting thoſe Faculties, not through any Defect of that ſpiritual, immaterial Being within, but only through an irregular Influence of the Brain, upon whoſe regular Motions the Exerciſe of thoſe intellectual Faculties are ſupported, as ſhall more clearly appear when we come to treat of the Exerciſe or Action of thoſe Faculties.

WHAT

CHAP. 2.

WHAT Mr. *Lock* is pleas'd further to argue concerning two different Conſciouſneſſes informing one organiz'd Body, and conſequently uniting two diſtinct Perſons under one common, human Appearance, is nothing to the Purpoſe; for to attempt to illuſtrate any philoſophical Point by an Hypotheſis, that makes a Thing, impoſſible in itſelf, poſſible in Nature, is to build Caſtles in the Air, and ſay any Thing at Pleaſure; which way of Reaſoning ought not to be admitted in Debates upon philoſophical Subjects.

To conclude this knotty, thorny, perplexed Subject; The Soul is a ſpiritual Being, that ſubſiſts, knows, and acts. The Queſtion then is, Whether when it ceaſes to think, know, or act, it neceſſarily ceaſes to exiſt? If it does, then, upon every Time it goes to ſleep, it is annihilated; then, upon every Time it awakes, and returns to think, it is a-new created; for the ſuſpending of a Power to act or think, is the ſame as to annihilate that Power, when its very Eſſence is conceiv'd to conſiſt in Action and Thinking. Theſe

are

PART I. are the unavoidable Conſequences, that neceſſarily ariſe from this Way of Reaſoning, when we apply Terms to Powers, that are incapable of ſupporting their Exiſtence.

## CHAP. III.

### *Of the intellectual Faculties of this ſpiritual immaterial Principle.*

OF this ſpiritual immaterial Subſtance, conſider'd in itſelf, and ſeparately from the Body, we can diſcover but a very faint and incompleat Idea: Our Knowledge then will be only of its Faculties, which are Perception, Reaſon, Underſtanding, and the Memory. Theſe Powers of the Soul are all organical, and depend on the Conſtitution of the Brain, and regular Influence of the Senſes, for the Clearneſs and Diſtinctneſs of their Actions, as ſhall appear more fully hereafter.

IN treating of intellectual Beings, we ought to be highly careful never to multiply

tiply the Number of their Faculties above, what the Providence of Nature has given them; and where we perceive different Degrees of the ſame Faculties, there to expreſs it by Terms, that imply thoſe different Degrees; and for this Reaſon the Imagination and Fancy, to me, ſeem nothing more than the Underſtanding leſs attentive to thoſe Objects it, at certain Times, does contemplate.

Of the Faculty of Perception.

PERCEPTION is that Faculty whereby the firſt Notices of all external ſenſible Objects are let in upon the Soul; it is the Origine of the Materials, that compoſe all our Thoughts, which are treaſur'd up by the Memory to be reviv'd at the next Reflection.

Of the Faculty of Reaſon.

REASON is the Sovereign Power of the Soul, by which we diſcover the Agreement or Diſagreement of all external, ſenſible Objects, and the Relations, Habitudes, and Connexions they bear to each other: It is that Faculty by which we abſtract, compare, and draw remoteſt Conſequences from ſelf-evident Principles; and may properly enough be call'd the

PART I. the Refiner of our Thoughts, and that Power by which we are diſtinguiſh'd from the brutal Claſs of the animated Creation.

Of the Underſtanding and Wiſdom.

THE Underſtanding is the nobleſt Faculty of the Soul, and that which, by way of Eminence, expreſſes our Wiſdom; which is only Reaſon and Underſtanding in Perfection. It judges of the Agreement or Diſagreement of Ideas, and diſcovers, after the laſt Efforts of our Reaſon, the Truth or Falſhood of any Propoſition, we put concerning the Natures of Things in this imperfect State.

Of the Memory.

THE Memory is a Power of the Soul, by which we revive the Ideas of Objects and Actions, that are paſt, and bring them into a View of the Mind, as if preſent. This Faculty, according to *Tully*, is twofold; the one natural; the other acquir'd: But whoever is pleas'd to take a ſerious View of the Memory, will eaſily perceive, that the artificial, or acquir'd, is only the natural Memory improv'd by continual Application and Study.

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So abſolutely neceſſary is this Power of the Mind, that, without it, no Degrees of Knowledge ſcarce could ſubſiſt in the Underſtanding: For the upper Rooms of this curious Cabinet are furniſh'd with Wiſdom; from what we have learn'd; but if there was no Remembrance of paſt Things, as there is no Knowledge of Things to come, ſo the Knowledge of the Mind muſt be confin'd to the Ideas of Things preſent, a Life ſcarce ariſing to the Dignity of Brutes.

THE Memory, therefore, treaſures up all the Ideas, it has no preſent Occaſion for, in a proper Repoſitory, to be brought into View at the next Reflection; and it is ſurpriſing to conceive, with what Readineſs ſome Perſons can relate all the different Words of divers Languages, give their different Characters, Senſes, and Significations, beſides an almoſt infinite Variety of Faces, Schemes, Buildings, and other ſenſible Objects, that are continually impreſs'd upon the Organs of the Senſes; yet this immenſe Crowd of different or oppoſite Ideas ſhall ſo exactly ſubſiſt in the Memory, that the Mind, upon

PART I. a ſudden Command of the Will, or a caſual ſlight Hint of the Soul, ſhall in one Moment revive a ſet Diſcouſe, conſiſting of different Words, Circumſtances, and Things.

THAT the Memory is a Faculty improvable, in certain given Circumſtances only, is evident from the faint Impreſſions that all Ideas make upon the Minds of both Infants and very old People, whoſe Images are liable to be eaſily eras'd, becauſe their Impreſſions do not reach the Mind with an Impulſe ſtrong enough to excite a full Conception of the Object: And they ſeem evidently not to do this, becauſe the Fibres of the ſeveral Avenues or Senſes, that lead to the Seat of the common Senſorium, are too much relax'd under a State of Infancy, and too much contracted under that of old Age, whereupon the Paſſions abate, and all the Faculties are but clumſily perform'd.

Of the Senſations in Infants, and why they are ſo languid.

IN Infants the *Machinulæ* of the Nerves and Fibres that compoſe the Brain are naturally ſo far relax'd, or ſtand at ſuch a Diſtance from each other, that they ſcarce permit

permit the Ideas of Objects to take Poſſeſſion of the Mind, from the Faintneſs of their Appulſe; which *Machinulæ* approach nearer and nearer to each other, and are ſuſceptible of ſmaller Impreſſions, as the Child advances in Years, till at laſt they arrive at the Point of their Perfection, which I take to be from the twenty fifth to the thirty fifth Year of our Age, varying this particular Period, according as the Conſtitution of the Habit is more or leſs bilioſe, phlegmatick, or abounding with the melancholy Humour. At this Time the Wit, Genius, and whatever elſe depends on the fineſt Touches of the Senſations, are in their fulleſt Zenith.

Of the Senſations in old Men, and why they are ſo imperfect.

THESE *Machinulæ* that ſupport the Senſations recede from this Standard, or Point of Perfection, as the Perſon more and more advances in Years, till, in old Age they are ſo cloſely purs'd up, as ſcarce to give the Mind any Intelligence from the ſtrongeſt Impreſſions of Objects. In the Extremes of old Age they are ſo ſtrongly contracted, as to ſtop up and obliterate all the Avenues to this noble thinking Being. BUT

PART I.

BUT this I muſt obſerve, that the *Machinulæ* that compoſe the Fibres of the Brain, do not arrive at their Centre of Perfection, ſo early as thoſe that compoſe the Fibres of the Nerves, which is the Reaſon why a longer Time is neceſſary to compleat our Underſtanding and Judgment, than our Wit and Genius; the former of which I think do not arrive at their full Matúrity, till towards the fortieth or forty fifth, and in ſome not till the fiftieth Year. I do not ſay, but that a Man may have a very large Share of Judgment before any of the foregoing Periods; but I am firmly of Opinion, that the Time of its Perfection is not fully compleated, till towards the forty fifth Year, though it muſt be confeſs'd, that ſome, in ſpite of Age, live Babies all the Days of their Life.

THUS far we have convey'd our Views, from the loweſt Fibre of Senſation, through a Series of Cauſes and Effects, till we arrive at the ſupreme Faculty of the Underſtanding, which, as a Judge, determines

termines the final Events of what is moſt proper for a rational Being to purſue. CHAP. 3.

THE Will comes laſt, and, as the Top Faculty of the Soul, determines the Man to Action, after the Reſult of Reaſon, Judgment, and the Underſtanding. Wiſdom conſiſts in acting upon reaſonable Motives, and the Underſtanding diſcovers thoſe Motives that may be moſt reaſonable for a rational Creature to act upon; ſo that tho' the Impulſe, with which the Fibres impreſs external Objects upon the Paſſions, may have a Power ſtrongly to impel the Mind towards theſe Objects; yet the Will is capable of counter-acting all theſe Motions of of the Paſſions, whenever the Mind is pleas'd to exert its Faculties in a proper Manner. This proper Manner of Acting in a regular Scheme of Life, ariſes from the Power, that the Will has to execute the Determinations of the Underſtanding, after balancing the Conveniences and Inconveniences, that attend the Iſſue of any Action, as far as it is in our Power to conceive. Of the Will.

PART I. THE Underſtanding lets us ſee the Advantages or Diſadvantages, that follow upon our Purſuit of any Objects; and the Will gives it Sanction for their Execution. But in our Purſuits of all irregular Actions, the Execution of the Will precedes the Inquiries of the Underſtanding; that is, the Mind acts upon Paſſion only, without any Reference to the Laws of God or Nature; that is, he follows, in his Actions, the Dictates of his ſenſual Appetites, which are ſure to lead him wrong; and, when indulg'd to Extremes, fail not to bear down both the Underſtanding, Reaſon, and whatſoever elſe is ſacred in the Animal OEconomy, and, from the nobleſt of all Creatures, reduce him upon a Level, or rather beneath the Condition of a mere Brute.

ACCORDING to this Syſtem, then, the Underſtanding is the ſupreme Faculty, and receives its Knowledge or Diſcoveries of Truth from the Aſſiſtance of Reaſon, which is a Faculty next to it in Dignity; and Reaſon ariſes from our Thought, which, in the Abſence of Objects, is that Faculty we call the Memory; and our Thoughts

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we receive from our Perception; and Perception from the Ideas that come in by Senſation; and theſe Senſations are furniſh'd to the Soul from the Impreſſions that Objects make upon the ſeveral Organs of the Senſes: And this is the Order of Nature, from whence the Soul itſelf comes poſſeſs'd of all that Store of Knowledge, that differs one Man from another.

FROM the Connexion of the foregoing Reaſonings, it clearly appears, that the whole Series of Faculties, that make up this Syſtem of humane Thoughts, are all depending on each other; ſo that though the Faculties be divers, yet the Soul preſerves the Unity of its Eſſence amidſt the Variety of its Operations.

Arguments to prove the Exiſtence of an immaterial Principle, diſtinct from Matter and Motion.

Now as theſe ſeveral Faculties ſubſiſt, and as they could not ſubſiſt without a Subject, therefore we juſtly conclude that they are ſupported upon a *Subſtratum*; and this *Subſtratum* the moſt ingenious Philoſophers have dignify'd with the Title of an immaterial Subſtance, and this Subſtance we call the humane Soul.

PART I.

AND that none of the foregoing Faculties alone can poſſibly be that Ray of divine Light, that ſhines thus bright within us, will appear evident from their being dependent on each other, and all ſubordinate Miniſters to the Soul itſelf; nor can it be Matter, or any of its Arrangements, for Reaſons I have given in Page 26. Nor can a Compoſition of Matter and Motion, or any of their Affections, be made to think, as this ſpiritual Principle in human Bodies can do; becauſe it's impoſſible, in the Nature of Things, that Matter and Motion, in themſelves incogitative and void of Senſe, can become cogitative and ſenſible only by Diviſion and Change of Place, which is all that Motion can produce in any Syſtem of Matter unorganiz'd, for the Reception of a ſpiritual immaterial Being; nor can it be all or any of the foregoing Faculties ſuperadded to certain Parcels of Matter, according to a Suggeſtion of Mr. *Lock*; for that would either be to deſtroy the Eſſence of Matter, or, at leaſt, to conſtitute a new kind of Matter, diſtinct from all other kinds of Matter, that we know of in the Creation.

CHAP. 3.

IT neceſſarily follows then, that That which thinks is the foregoing Faculties ſuperadded to an immaterial Subſtance; this immaterial Subſtance muſt reſide in the Brain ſome how, and conſequently have its proper *Ubi*; and though it may be difficult, or rather impoſſible, exactly to determine the Seat of its Reſidence, yet the Center of the Brain, from its Structure and Mechaniſm, ſeems moſt capable of lodging this divine Gueſt; for there, moſt probably, is plac'd the Seat of the common Senſorium; there the Organs of the ſeveral Senſes reach, and thither they convey all their Reports of Matters, that concern the Mind's Cognizance.

AND thus the God of Nature has form'd us; and thus he has ordain'd, that Material ſhould obey the Direction of immaterial, and immaterial of material Beings. Thus Matter moves Thought, and Thought Matter; and thus the intellectual Faculties are affected with Matter and Motion, and ſubject to Pleaſure and Pain, both from Objects that have, and thoſe that have no immediate Contact with the Body, but only act at a Diſtance.

## CHAP. IV.

### *Of the Exerciſe of the foregoing Faculties, in producing the natural Principles of Wit and Genius.*

IT naturally falls in my Way here to ſpeak of Wit, after diſcourſing of the ſeveral intellectual Faculties, becauſe it is a Power or Habit of the Mind ariſing from a Quickneſs or Readineſs in their Exerciſe, and demands a peculiar Structure, Mechaniſm, and Modulation of the Brain, for its ready Production. This Habitude can never be learn'd, but is the peculiar Gift of Nature, whereby its Proficients are enabled to expreſs the fineſt, ſofteſt, and tendereſt Sentiments upon every Object, in the moſt ſurprizing, lofty, and elegant Manner.

Definition of Wit in Converſation.

WIT then, abſtractedly conſider'd in itſelf, and as it relates to Converſation in general, I define to be a Readineſs of expreſſing the moſt delicate Sentiments in the fineſt Manner. BUT

CHAP. 4.

What Disposition or Action of the Mind necessary to form a complete Wit.

BUT in order to enjoy this happy Disposition of Genius, it is necessary that his Mind be endued with a polite, elegant Turn of Thought, a Quickness of Memory, and a noble, graceful Manner in the Delivery of his Sentiments; for unless the Organs of the Memory readily revive agreeable Ideas, and unless also there be a Quickness, and Facility in the Expression, he will scarce pass for a Wit of the first Class or Standard.

The Disposition necessary in the animal Organs.

WHAT Disposition, therefore, it is in the Brain, Nerves, and Organs of the Habit, that furnishes the Mind with those lively Ideas, that so agreeably surprize Mankind, may not be a Subject unworthy of our Enquiry.

WE observe that all Wit, or those Prettinesses of Expression, that so singularly please in Conversation, arise in the Speaker from a strong Impulse of the Ideas made on the Seat of the common Sensorium. Now it is impossible that this stronger Impulse can be made on the Seat of the common Sensorium without a plentiful Secretion of animal Spirits; or that

PART I. there can be a plentiful Secretion of animal Spirits to convey the Ideas of Objects, without the glandulous Subſtance of the Brain be tight, firm, and elaſtick; ſo that in order to form a fitting Habitation for the Reſidence of a finiſh'd Wit, it is neceſſary, that the Arteries be greatly ſpringy, the Blood eaſily moveable, the Secretion of the Spirits naturally large, and the Syſtem of the Nerves ſcrew'd up to the higheſt Degree of Elaſticity their natural Standard will admit.

FROM a Syſtem of Veins, Nerves, and Arteries, thus conſtituted, it often happens, that the Sallies of Wit are involuntary Starts, and ariſe from extraordinary Motions of the Soul, which elevates the Faculties above their natural Sphere of Action; that is, when the Impulſe of the foregoing Inſtruments are brought neareſt the Point of their Balance, that is, the Center of their Perfection; then it is, that the Mind is in its higheſt Elevation, the Faculties expanded to their loftieſt Height. And this is the State of the Mind in thoſe extremely fine Deſcriptions, that ſo ſenſibly affect us in poetick Writings,

the very reading of which ſhall ſurprize the Soul with very great Emotions. All thoſe ſublime Flights and extatick Viſions, that elevate the Soul above itſelf, whereby it towers above the Clouds, ſoars into inviſible Worlds, and diſcovers Beauties, in that vaſt immenſe Theatre of the Univerſe, indiſcoverable by meaner Capacities, owe their Riſe to this due Modulation of the Solids, to this happy Structure of the Fibres.

We generally obſerve, that the moſt elevated Wits, or thoſe of the ſublimeſt Claſs, are ſenſibly affected with the leaſt Diſreſpect; their Paſſions are all Tinder, that takes Fire from the ſmalleſt Spark, and blaze into a Flame at the leaſt Reſentment; like Razors exquiſitely finely ſet, that ſoon loſe their Edge, they are eaſily diſconcerted from the leaſt Changes in Nature.

Of Wit in Buſineſs.

Wit in Buſineſs, or a Readineſs to tranſact Affairs, differs not from Wit in Converſation, and is only the applying our witty Thoughts to Action, according as the Exigence of our Affairs ſhall differently

PART I. rently demand our Application; and as the former conſiſts in expreſſing our Thoughts, with Quickneſs and Vivacity in an elegant Manner; ſo this latter in readily putting thoſe Thoughts in Execution; and therefore demands the Aſſiſtance of Judgment to aid the Contrivance of its Schemes, and balance the Impetuoſity of the Paſſions; and for this Reaſon we not improperly term Perſons of this Complexion judicious Wits, or Men expert in Buſineſs.

Now, the Mind, by Virtue of its thinking Principle, having a Power to contemplate any of its Ideas, will certainly entertain thoſe, that will give it moſt Pleaſure; and thoſe will afford it generally the moſt Pleaſure, if they are of the pleaſing Kind, that came in laſt, becauſe they are new; and this is the Reaſon why witty People are ſeldom long pleas'd in the ſame Circumſtances; nor indeed is it poſſible they ever ſhould, ſince different Scenes of Pleaſures are continually ſoliciting their Senſes with the ſame Degree of Impulſe.

GREAT Wits alſo ſeldom are remarkable for a large Share of Judgment, or any tolerable Method of juſt reaſoning and ranging theſe Ideas, that crowd ſo faſt upon their Imagination; and to this Origin I impute that Fickleneſs and Changeableneſs of Temper they are ſo apt to be affected with; for Reaſon and Judgment, where they exiſt in any eminent Degree, require Thought and Attention on the ſame Ideas, eſpecially when we would employ thoſe noble Faculties in diſcovering the more ſecret and hidden Properties of material Objects, and what Relation they bear to the reſt of the Univerſe; but for theſe Enquiries, the moſt refin'd Wits have not Time, from the Succeſſion of Ideas that crowd upon their Minds equally ſtrong, and equally affecting; and as the laſt are generally the neweſt, and the neweſt, from the Deſire of Novelty, always the moſt pleaſing, ſo it comes to paſs, that they change their former, for theſe Ideas, that compoſe their latter Thoughts, and govern their Actions in Life accordingly.

PART I.

Of Wit in Books.

WIT in Books requires that the Lines be natural, and the Subject well choſen. Poetry is the nobleſt Manner of Writing, that the Faculties of the Mind can engage upon: It affords the moſt ſurpriſing Flights, upon all the various Scenes of Art and Nature. In Writings of this Kind, intended to pleaſe, the Genius ſhould always riſe in Proportion to the Dignity of the Matter, and fling out the boldeſt Flights on the ſublimeſt and moſt important Incidents. When a Start of the Imagination has flung out an uncommon Sentiment, it depends on an After-Thought to poliſh, refine, and purge it from that Droſs, it might have contracted in its firſt Conception. This calls for the Aſſiſtance of Judgment, which is always neceſſary to finiſh a complete Poet.

IF a Man talks well, and writes ill, it's becauſe the Ideas of the Subject he treats of, paſs the Mind faſter than the Memory can diſtinctly retain their Connexion; ſo that the Chain of his moſt beautiful Thoughts are broken and confus'd, before he can commit them to Paper in that elegant Order they firſt aroſe to his View.

MANY

CHAP. 4.

MANY Perſons will talk exceeding well upon any Subject, entertain you with a fine Flow of Words, a Volubility of Tongue, and yet write very ill. This Incapacity of Writing ariſes from the natural Springineſs of the Fibres, that compoſe the Brain; whereby the Ideas of Objects are ſtruck on the Seat of the common Senſorium with a ſtrong Impulſe, which being ſucceeded by others equally as ſtrong, and theſe by others equally affecting, it follows, that though the Mind can take hold of them to diſcharge in Vollies of choice Epithets, or ſmart Repartees; yet from the continual Impulſes is the Memory unable to retain them in that natural Order neceſſary to ſupply the Diſcourſe with Diſtinctneſs and Clearneſs. And hence it happens that Perſons of this airy Caſt of Mind are but indifferent OEconomiſts; for the ſucceſſive Impulſes, being ſtrongly ſtruck on the Fancy, violently impel their Inclinations to divers Schemes at the ſame Time; whereby they are conſtant to nothing but Inconſtancy it ſelf, promiſing themſelves golden Mountains in this, in that, and every Scheme they undertake; though nothing proſ-

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PART I. pers through their Fickleneſs and Unſteadineſs of Temper.

From whence the Miſcarriages of our Projectors ariſe.

AND to this Origin, I think, we may impute the Miſcarriages of moſt of our Projectors; for though they are often endu'd with Talents excellent at Invention, yet either through a Miſcalculation of the Expences neceſſary to conduct the Enterprize, or for want of Judgment to balance the Impetuoſity of their Paſſions, and keep them ſteady to the ſame Project once begun, it often happens that moſt of their well-concerted Schemes come to nothing. For this Reaſon we frequently obſerve, that thoſe, that are remarkable for a Maſtery in the ſuperior Sciences, are generally moſt ſtrongly impell'd towards Wine, Women, and Muſick; that is, theſe Objects have a greater Influence over their Paſſions, than thoſe caſt in a more abject Mould, or whoſe Fibres are leſs curiouſly modulated, becauſe the ſeveral Organs of their Senſes, are more delicate in their Texture, and lie opener to the Enchantment of thoſe deluding Objects, through a more exquiſite Reliſh in their Senſations; and it

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is an Obſervation verified from conſtant Experience, that not only your elevated Wits are thus prone to their Pleaſures, but the moſt excellent Artiſts of the loweſt Claſs of Mechanicks, can never be prevail'd on to work at the meaneſt Occupation, ſo long as they have got a Penny to ſpend.

YET after all, I muſt confeſs, that there ſeems, to me, ſome peculiar Oddities in a Genius of the fineſt Caſt, not accountable from the Laws of our Philoſophy; but this Conceſſion no ways deſtroys the Grounds of their depending on mechanical Powers, but only diſcovers our Ignorance and Want of Judgment, to explain theſe ſingular Properties of Wit agreeable to the Tenour of thoſe Laws.

To conclude: From theſe Reaſonings and Arguments it evidently appears, that the fineſt Genius, that the World could ever boaſt, depended on the due Modulation of the Fibres. From this proper Stricture of the Nerves, aroſe thoſe fine Compoſures, that our Countryman *Shakeſpeare* naturally writ, and which ſtill continue

PART I. tinue to pleaſe our Gentlemen of the fineſt Taſte. To this happy Mechaniſm of the Organs we owe the Fire of *Homer*, the Floridneſs of *Virgil*, and the Strength and Beauties of *Milton*. Theſe Men, all in their Times, were Originals, and excell'd in the fineſt Way of Writing upon the ſublimeſt Subjects; and very few of their Followers have ever been able to equal their excellent Compoſitions.

## CHAP. V.

### *Of the Exerciſe of the foregoing Faculties, in producing the natural Principles of Stupidity.*

THESE two Subjects, concerning Wit and Stupidity, I have choſe to place in the neareſt Diſtance to each other, that, like the Shades and Lights in Painting, the Reader may more diſtinctly view the Difference between the Principles that ſupport a fine natural Genius, and thoſe that affect the Organs of the rational Faculties with a Slowneſs, Dullneſs, and Heavineſs in their Exerciſe; and

and I queſtion not, but that it will be diſcoverable, from the following Obſervations, that it's highly probable, I dare not ſay certain, that the ſole Difference between the moſt elevated Genius, and the moſt abject Stupidity, depends more upon the peculiar Structure and Harmony of the Fibres, than what perhaps hitherto has been taken Notice of.

I SHALL therefore, in this Chapter, make it my chief Buſineſs to diſcover, how, from many accidental Cauſes, the Exerciſe of thoſe ſovereign Faculties may be diveſted of their Rationality; and the brighteſt Wits, and moſt exalted Underſtandings, from the mechanical Affections of Matter and Motion, reduc'd upon a Level with the moſt abject and unintelligent Changlings; and if ſuch Changes are poſſible in Nature, and do often happen under divers Diſeaſes, it will be a well ſupported Probability, that the Center of Perfection, in Relation to the Exerciſe of the intellectual Faculties, may not ſo much depend on any Inequalities of Knowledge in the Faculties themſelves, as in the different Motions of their Organs, while the Soul is oblig'd to animate theſe corporeal Machines. And, that this is ſo

PART I. will appear more than probable, from the Diſorders that neceſſarily enſue in the Exerciſe of theſe noble Powers, when ever the Figure, Motion, and Texture of the Brain, or Organs of the ſeveral Senſes, are from any Cauſes diſconcerted.

Do we not daily ſee, in the moſt familiar Inſtances, that a Man of the brighteſt Parts, and moſt enlarg'd Underſtanding, ſhall have all his Wiſdom and noble Endowments diſconcerted by the Tyranny of a nervous Fever, or a caſual, ſudden Fit of Lunacy; and under theſe Preſſures, how awkwardly does he exerciſe thoſe Powers, with which, but a little before, he charm'd Mankind, was able to penetrate into the ſecret Receſſes of Nature, and diſcover the Laws of Beings, lying in their primitive Beds, ſcarce yet form'd into their proper Species: Yet even now we behold him, diveſted of the Exerciſe of his Rationality, can we ſay that his Soul differs from what it was before? Not at all, certainly; remove but the Clog of Matter that the Motion of the Fever, or Starts of Lunacy, laid upon the Organs of the Brain,

and

and the regular Operation of all the Faculties returns, his Reaſon brightens, his Parts revive, and he becomes, in every Reſpect, the ſame amiable Perſon he was before. CHAP. 5.

How natural therefore is it to conclude, from the foregoing Reaſonings, that an Idiot, or Changling, as Mr. *Locke* is pleas'd to expreſs it, is born with the ſame Clog of Matter on the Organs of his Intellectuals, (I do not ſay the ſame Fever, for the Avenues of the Brain may be ſtopp'd without a Fever;) that will accidentally reduce the wiſeſt Man into the Condition of a mere Natural; and that the Want of Reaſon, in theſe Creatures, does not ariſe ſo much from a Want of a reaſonable, human Soul, as the Want of proper Organs to exerciſe the reaſonable, intellectual Faculties.

A ſurprizing Inſtance of a Woman that recover'd the Uſe of her Senſes, after ſhe had been diſtracted near twenty Years.

Mr. *Everard*, formerly Apothecary in *Milk-Street*, was pleas'd to tell me, that he perfectly knew a poor Woman near *Namptwich* in *Cheſhire*, that had been ſubject to Fits of Lunacy for near twenty Years. This Woman, as ſhe was wandring among the Rocks and Mountains near that Place, accidentally ſlipt from

PART I. the Ridge of a ſteep Hill, near 150 Foot high, and in the Fall broke her left Arm, but received this Advantage in Recompence, that ever after ſhe recover'd the perfect Uſe of all her Senſes.

THIS ſurprizing and ſudden Change could happen no otherwiſe, but as the Shock, ſhe receiv'd in the Fall, turn'd her Brain right, that, by ſome accidental Stroke before, had been turn'd wrong; or at leaſt the Concuſſion ſhe receiv'd in the Fall open'd ſome Avenues of the Brain, whoſe Obſtructions before interrupted the right Diſplay of thoſe Organs, on whoſe Rectitude the rational Exerciſe of the intellectual Faculties had their principal Dependance. Had this Woman been born with the ſame Preſſure upon the Organs of the Brain, that ſhe ſuffer'd for the twenty Years before the Fall, no doubt, but that, according to Mr. *Locke*' Principles, ſhe would have had no more Title to Humanity, than a Monſter, whom I take to be a Creature ſo miſhapen in its Members, as renders it proper to be ſtruck out of the Liſt of the human Species.

BUT

CHAP. 5.

BUT to enforce this Point more clearly, and prove that this Exercise of the Faculties is intirely dependant on the Exercise of the Solids and Fluids, I shall beg leave just to touch upon the Causes of those irregular Turns of Thought, and false Appetites that often affect young Girls under the Green Sickness, and why they covet Things disagreeable to their Natures, and which they themselves would loath under a sound State of Health.

Of the Change of the Appetite under the Green Sickness.

WHO would think it possible, did not daily Experience convince us of it, that a thin, pale, meagre Girl should covet toasted Coals before wholesome Food, or prefer the cranching of dirty Lime and Tobacco Pipes before the most delicious Viands, or the harsh Noise that arises from treading Cinders under Foot, before the most melodious Musick? and yet in Fact I am able to produce numberless Instances in Confirmation of these Cases. And that these strange and unusual Desires arise only from a perverted Motion of the Solids and Fluids, is clear; for if, by proper Applications, you recover these

PART I. bodily Organs to their regular Standard again, theſe unnatural Deſires, and ſtrange unuſual Fancies will vaniſh of their own Accord.

I SHALL conclude theſe Reflections with one of the moſt ſurprizing Hiſtories that perhaps ever was taken Notice of before. It is of a Gentleman that was wittieſt when he was mad, and ſillieſt when he was ſober; that is, recover'd to the natural Exerciſe of his Organs again. In this Caſe the accidental Shock that often turns the Brain wrong, ſhov'd his right, and recover'd ſome Glimmerings of Wit and Genius to him, that was born but one Remove from a mere Natural.

A very remarkable Hiſtory of one that was wittieſt when he was mad, and ſillieſt when he was ſober.

IN the Times of *Henry* III. of *France*, there happen'd to reſide at Court, a young Gentleman of a very graceful Deportment, but whoſe Converſation was extremely low and trifling; yet for this outward Appearance, this Mimickry, and Shape of a Man, ſeveral Court Ladies could not but entertain a very high Value and Eſteem. It ſo fell out, as he was one Night returning from a Ball,

that

that a young Gentleman tript up his Heels, and gave him ſuch a Bang upon the Scull, as greatly diſconcerted his Brain, and flung him into Fits of Lunacy; but however, during the Intervals of his mad Fits, he acquir'd ſuch a Knack of ingenious Raillery, as greatly delighted the whole Court. The *French* King, extreamly pleas'd with this new Change, gave eſpecial Orders to his principal Phyſician, that, if poſſible, he would recover him from thoſe Fits of Lunacy, that render'd him inconverſable to the Court. The Phyſician purſued the King's Inſtructions, and in a little Time Succeſs anſwer'd his Expectations; but no ſooner was the habitual Temperature of his Body reſtor'd, but the ſame cringing Softneſs and Stupidity return'd with it; ſo that all thoſe fine ingenious Turns, and witty Starts of Fancy, vaniſh'd into Air, to the no little Diſappointment of his courtly Admirers.

FROM the Reaſonings and Circumſtances of the foregoing Caſe, we clearly diſcover, that thoſe Changes that in others often diſconcert the Brain for the

PART I. worſe, in him happen'd for the better: This Shock, or Fall, gave him ſome Glimmerings of that Light, which according to the original Conſtitution of his Organs, he could never naturally enjoy in this Meridian of his Being; and if the Blow had been a little ſtronger, and ſtruck the Seat of the common Senſorium a little more askew, or parallel to the Axis of the ſeveral Organs of the Senſes, who can doubt, but that his reaſoning Faculties would have ſhone out in their fulleſt Luſtre? But then the fine Deportment of his Carriage, the graceful Mein of his Perſon, and former obliging Air, in all Likelihood, would have been greatly diſconcerted, and ſuffer'd in the Change.

AND here a Reaſon is ſuggeſted to me, why ſome Individuals are never capable of any tolerable Degree of Knowledge, that may ſet them above the Level of a Changling, becauſe thoſe Organs, on which the Improvements of the Mind depend, are incapable of ever being unfolded through a natural Defect of the Impulſes neceſſary to reſolve the Obſtructions, in thoſe fineſt Fibres of the

Brain, on whoſe Freedom the nobleſt Senſations have their Dependance. CHAP. 5.

THIS Impediment ſometimes ariſes from the Syſtem of the Arteries being naturally too much contracted or relax'd; and then it is owing to a Fault in the Habit; but it may take its Origin from an over Laxneſs in the Fibres of the Brain, whereupon there will follow, a natural Stupidity for Want of a ſufficient Appulſe of the Object, or for Want of a ready Power in the Organ, to tranſmit that Appulſe to the Seat of the common Senſorium.

THE ſame noble Endowments will be but clumſily exerted, in Caſe theſe fineſt Fibres of the Brain be too much loaden with a ſeroſe, phlegmatick *Parenchyma*, afforded to the nervoſe Fibres, to prevent their too exquiſite Senſations; for then it will in ſome Degree interrupt the Tranſmiſſion of Objects to the Seat of the Underſtanding, upon which there will follow, a Slowneſs, Dullneſs, and Heavineſs in the Capacity, to apprehend the Ideas of theſe Objects.

SOME

PART I.

SOME Infants are naturally born with dull and heavy Intellectuals; that is, the Mind cannot diſplay its natural Faculties, through a natural Imperfection of the Organs; but theſe natural Indiſpoſitions are often greatly remedied from Application and good Maſters: And this Obſervation we frequently ſee verify'd in the Iſſue; that dull heavy Boys often come to be able and experienced Men. So that Stupidity only ariſes from a natural Depravity of the corporeal Organs, whereby they are incapable of conveying the Ideas received from Senſation, to the reaſonable Faculties with that Clearneſs neceſſary to produce Deſires in the Mind; that is, the Harmony or Beauties that appear in the Objects, that adorn the Univerſe, have not a Power to affect their Faculties, through Want of proper Organs to diſplay their Beauties. If this natural Incapacity or Defect ariſe from Obſtructions in the nervous Fibres, Children ſo born will be little more intelligent than mere Naturals.

FROM theſe Obſervations we clearly diſcover, that the Soul is invariably the ſame;

ſame; and that it is only the bodily Organs, and their right or wrong Diſpoſition, that alter the Exerciſe of its Faculties, and give us thoſe different Ideas of the different Capacities of Mankind in Relation to their different Degrees of Knowledge and Stupidity: And I firmly believe that, were it poſſible to conceive two Perſons in whom the Texture of the Brain, Nerves, and other Circumſtances, were modulated in equal juſt Proportions, as to their Matter, Motions and Impulſes, that their Actions, their Capacities, Inclinations, and Manner of Thinking would be the ſame; and the Individuum of the Perſon, would only be ſupported from the particular Exiſtence of the different **Ubi*, and the different Objects they converſed with.

To conclude: The Soul itſelf, by the Aſſiſtance of its Faculties, in a regular Syſtem of Organs, has a Power of intending or remitting the Circulation of the Blood; and conſequently of contracting or relaxing the Motions of the Fibres on which that Circulation depends; and if ſo, then it muſt have a Power of contracting

* By this Word *Ubi* here, is intended that particular Point of the Brain where the Soul reſides, at leaſt diſplays its Functions; of which, as the Author is intirely ignorant, ſo he chuſes to expreſs his Ignorance by that Word; becauſe it beſt marks out the Exiſtence of a Being to a particular Time, Place, and other Circumſtances.

PART I. tracting or relaxing the Motion of the Nerves, that ſerve any of the Senſes, and conſequently, of improving the Ideas that come in by any particular Senſe it is pleaſed to view with Attention. This Attention to thoſe particular Ideas, like Motion to the Body, ſo reſtores the Nerves of any particular Senſe, that the Mind is thereby render'd capable of judging of Objects with greater Exactneſs: And this Capacity of Judging we call acquired, which depends on Study and Application; and hence ariſes the Difference of Mens Inclinations to different Arts and Occupations, according as the Mind ſhall naturally, through any of the Senſes, diſcover greater Beauties or Pleaſures in one Art than another, which accordingly gives a different Determination to the Will.

So that according to this mechanical Way of reaſoning, the Excerciſe of the rational Faculties, *viz.* of Judgment, Underſtanding, and Memory, depends upon the Clearneſs of our Conceptions, and the Clearneſs of our Conceptions on the Diſtinctneſs of our Ideas, and the Diſtinctneſs,

tinctneſs of our Ideas on the Exactneſs of our bodily Organs; whereby the ſeveral Senſes are render'd capable of tranſmitting their Ideas to the Underſtanding, with all the Beauties, that they poſſibly can receive from the Objects of Nature. 

## CHAP. VI.

### *Of the Riſe, Progreſs, and Action of the Natural Paſſions, and their Influence upon human Bodies.*

I HAVE choſe to treat of the Paſſions next to the intellectual Faculties of the Soul; becauſe ſeveral of them ſeem to have a very near Connexion and Dependance on the Exerciſe of theſe Faculties, and to be produced into Action by that Medium, that conjoins Matter and Thought, or tacks theſe Faculties to the Syſtem of corporeal Organs.

How the Paſſions are produced.

ALL Changes in our Thoughts ariſe from Deſires, and Deſires intended produce

PART I. duce the Paſſions. The Paſſions thus ariſing, receive conſiderable Force from divers Objects, that have a Power immediately to alter the Exerciſe of the Faculties, or the immediate Determination of the Mind, by firſt altering the Motion of the Fibres; for though the Mind continues permanently the ſame, and is invariable in its Exiſtence; yet if an Alteration is made in the Organs by which it acts, it will, as much, vary its Operations and Powers, and conſequently appear the ſame to us, as if an actual Alteration was made in the Subſtance of the Soul.

Now what that Medium is, whereby the Mind diſplays thoſe Paſſions upon the Body, and alters the Circulation of the Blood, the Motion of the Fluids, and Vibration of the Nerves and Arteries, may not be a Subject improper for our Enquiry. I was, indeed, of Opinion in my *New Theory of Phyſick*, that the Paſſions themſelves were that Medium that conjoins Matter and Thought; but then this Queſtion recurrs, *viz.* What is it that flings theſe Paſſions into Action? that is, what Inſtrument does the Mind,

Mind, or its Faculties, make use of in exciting these Commotions, Agitations, or Conflicts in the Soul? And this I take to be a most subtile fine Animal Æther, of different Elasticities, agreable to the different Springynesses of the nervous Fibres. CHAP. 6.

By this Animal Æther, I mean no more than Matter resolved into the last Degree of Fineness, after it has passed through all the Changes it is capable of in the Animal OEconomy; which is different according to the different Constitutions of different Individuals. To this Animal Æther the Passions owe their different Activity, which is the Reason why bilious Constitutions are most passionate, the sanguine less active, the Phlegmatick more compos'd, and the Melancholy degenerating into an abject Fearfulness; and hence we discover why the same unwelcome Objects coming to different Persons shall differently affect them. A Person hears evil News; upon which he perceives Woe and Misery ready to break in upon him; he sinks under the Weight, and is unable to bear up under the Pressure. Tell

the

PART I. the ſame unwelcome Circumſtances to another whom they as equally concern, and he ſhall receive the Diſcloſure with Courage, and caſt about how he may beſt extricate himſelf out of theſe Difficulties.

THIS different bearing up, under the ſame Misfortunes, from the ſame Objects, certainly depends on the different Structure of the Fibres; and that different Springyneſs of the Animal Æther, which ſo fortifies the Mind of this latter againſt the impending Storm, that the threatn'd Danger cannot deject him, while the former flags, and falls into Deſpair for Want of that Force or Elaſticity, in the Animal Æther, to ſupport the Faculties, balance the Mind, and keep the Paſſions ſteady.

To ſupport, therefore, this Article of the Paſſions on the cleareſt Foundations, I ſhall beg Leave to conſider the Difference between Courage and Fear, and how theſe two Habitudes of the Mind may be changed, from different accidental Cauſes acting upon the Organs of the Body.

After

Afterwards, I ſhall proceed to treat of thoſe Paſſions, that derive their Origin more immediately from the Direction of the Mind and its Faculties, as the readieſt Means to conceive as much of their Nature, as the Difficulties, attending ſuch a perplexed Subject, will admit. CHAP. 6.

Now Fear is a Paſſion of Weakneſs, that ariſes from a palſical Diſpoſition of thoſe Fibres of the Brain, where the Soul immediately reſides, or at leaſt from too great a Relaxation of thoſe Fibres, that immediately ſupport the Mind in its Action of Thinking; and which conſequently infer divers Changes in our Thoughts, all of the abject Kind. If theſe Relaxations happen to be natural, then is the Perſon naturally a Coward, and unable to ſtand his Ground againſt any powerful Oppoſition: That this is ſo, will ſtill more clearly appear, if we attentively conſider, from whence we have the Idea of that oppoſite Habitude we call Courage. Of Fear and Courage.

Now Courage is only a ſteady Preſence of Mind, in the Midſt of dange-

PART I. rous Enterprizes, which always demands a plentiful Secretion of this Animal Æther for its Support, that ſo fortifies the Soul, in its juſt View of the Action, that it does not fear thoſe Conſequences that, perhaps, would put Perſons, with Nerves leſs elaſtick, into a Panick. What ſtill more ſtrongly ſtrengthens this Opinion, is, our conſidering how far this natural Habitude may, in ſome Conſtitutions, be improv'd by Art; and how very Cowards may acquire a Valour above what their natural Temperature has given them.

EVERY Body knows, that a Glaſs of generous Wine will raiſe the Motions of the Animal Fluids, and inſpire the moſt daſtardly Spirits with Courage to face the ſtouteſt Mortal; when, perhaps, were he ſober, and clear of this artificial Help, not all the Reaſon in the World could prevail on him to look the ſame Enemy in the Face.

THIS Change appears clearly to depend on the plentiful Secretion of the Animal Spirits driven, from a greater Impulſe

pulſe, into the Fibres of the Brain, that, for a Time, gives a new Spring to the Animal Æther, and ſets the Coward upon a Level with the greateſt General: Nor is it only poſſible to make Cowards valiant, but divers Accidents may happen to abate the Valour of the moſt conſummate Heroes: For if, by Purging, Bleeding, and ſhort Feeding, you abate the natural Elaſticity of the Fibres, their natural Courage will ſink, flatten, and decay to the laſt Degree of Impotency: And I am credibly inform'd, that the late Duke of *Marlborough*, in the laſt Moments of his Life, was ſo infirm of Mind, through a Decay of the nervous Syſtem, as ſeveral Times to weep like a Child, tho' certainly, in the Field, he was one of the moſt intrepid Sons of *Mars*, that ever fac'd an Enemy. CHAP. 6.

THIS, I think, is a Demonſtration clear enough, how much the Minds of the braveſt Men, may not only be debas'd by Age and other Accidents, but how even the moſt natural Cowards may be raiſed to the higheſt Pitch of Valour for a Seaſon.

PART I.

Of the ſenſible Paſſions.

THESE Paſſions, that derive their Origin more immediately from the Commotion of the Mind, and raiſe or depreſs the Motion of the Animal Fluids above or beneath the Standard of Nature, I call the ſenſible Paſſions; becauſe they generally ariſe from the Senſe of Objects ſtriking the Mind with a forcible Impulſe. Theſe Objects of the Paſſions are, whatever may create Anger, Joy, Fear, or Grief; that is, affect the Soul with any of the foregoing Changes, and diſconcert her Serenity: Hence it follows, that our Paſſions are only our natural Sentiments heighten'd or depreſs'd above or beneath the Balance of Nature, as happens in violent Anger and Joy, Fear and Grief, which are no where, when the Objects are not in View of the Mind, to excite them.

IN the Production of every particular Paſſion, there ſeems to be a Colliſion between the Faculties of the Soul, and the Motion of the Animal Fibres; which irregular Motions ariſe from the Impulſe, that the Idea of the Object makes on the Mind. Thus we frequently obſerve, that the Senſe



of

of Sounds can change the Motion of the Animal Fluids, as in violent Anger arising from disobliging Expressions or Actions; but it's impossible, in the Nature of Things, that any Force of Words can immediately operate upon the Blood and animal Fluids to give them immediately this new Determination, did they not first raise a Commotion in the Mind, which moves the Animal Æther to move the Nerves, that moves the Arteries to move the Blood.

IN all great Transports of Joy, and the other exhilerating Passions, the Beating of the Heart and Arteries, and consequently the Motion of the Animal Fluids, are enforc'd and accelerated, in much the same Manner, as in the Angry Passions; only the Difference arises from the pleasing or disobliging Objects with which these different Sensations are struck on the Mind in exciting these different and opposite Passions.

I KNOW the celebrated *Des Cartes* endeavours to make the sensible Passions depend on mechanical Causes, independant of the

PART I. intellectual Faculties, and the different Senſations conſequent thereupon; but how that Gentleman would be able to account for thoſe Paſſions, that ariſe from the Senſe of Sounds, independant of any Force from external Objects, I am unable to conceive. The Senſe of Sounds can no Ways operate upon the Body, but as they firſt operate upon the Mind; and, by firſt exciting a Motion in the Mind, that Motion, in the Mind, produces a Change in the Motions of the Animal Fluids. The Medium by which theſe Changes are effected, as I have already obſerved, is a moſt ſubtle Animal Æther of different Elaſticities, ariſing from the different Temperatures of the Habit.

THOSE Looks, Geſtures, and different Motions of the Countenance, that betray the Affections, in divers Paſſions, ariſe from different Sentiments in our Thoughts, that differently determine the Contraction of thoſe Fibres that compoſe the Muſcles of the Face. Every Paſſion, that differs from another, has either a different Muſcle, or, at leaſt, a different Motion of the ſame Muſcle to expreſs it by; were it not for

these Distinctions of the Countenance, in different Passions, it would be impossible to discover, when Persons were angry or pleas'd, merry or sad; so that these Muscles are form'd, by the beneficent Author of our Being, as an Index to the Mind, to discover the inward Sentiments of undisguis'd Nature: Nor could we possibly know the internal Thoughts of this immaterial Substance, that resides thus surprisingly within us, unless those Characters were engraven on corporeal Organs, that they might appear legible to the rest of Mankind; so that the Action of the Muscles serving the Countenance, give us certain Indications concerning the internal Operations of the Mind, as they are differently display'd in divers Passions of Anger, Joy, Grief, *&c.* And if any belye the Motions of these Muscles, and screw them up into a fawning or devout, sanctify'd Position, when he is envious, or inwardly guilty of the most enormous Vices, we fail not justly to brand such an one with the Title of an Hypocrite. And hence it appears, that Hypocrisy is one of the most detested Crimes, that human Na-

PART I. ture can be guilty of; for the Hypocrite not only debaſes his Reaſon, which teaches him to expreſs Truth, both in his Words and Actions, but he lives a continual Lye, both to his God, himſelf, and all good Men.

THE Ebbs and Flows of the Paſſions often ariſe with that Force, as greatly to diſconcert all the Senſations; and then they depend on the Mechanical Powers of the Solids, or thoſe Impulſes they receive from the ſudden Starts of the Mind upon any violent Surprize. Theſe Affections of exceſſive Joy or Grief, thus ariſing from the different Senſations of divers Objects, differently move the Mind and its Faculties; the Mind and its Faculties, a fine Animal Æther of different Elaſticities, on which they immediately diſplay their Force; this Animal Æther, the Nerves and their Fluids; the Nerves and their Fluids, the Heart and Arteries; and they again affect the ſubordinate Motions, and Under-Springs of the whole Animal Machine.

CHAP. 6.

AND hence it happens, that great Fears, Griefs, Sorrows, or Diſappointments, retard the Motion of the Blood, the Secretion of the Fluids, and infer Obſtructions and ſchirroſe Swellings in divers of the inferior Viſcera; becauſe theſe dejecting Paſſions rebate the Motion of the *Plexus Nervoſus*, that immediately communicates with the principal Organs; and, by this Conſent, it retards the Motion of the Heart, Stomach, Diaphragm, Inteſtines, Spleen, and Parts miniſtring to Generation, whereby theſe ſeveral Organs are greatly affected, under all ſudden and ſurpriſing Paſſions. And this is the Cauſe of thoſe violent Palpitations and Flutterings of the Heart, of thoſe Indigeſtions and Loſs of Appetite, that moſt generally enſue upon any great and ſudden Commotion: And hence we diſcover, why Coſtiveneſs is an inſeparable Symptom under the Spleen, Vapours, and Hypochondriack Melancholy; becauſe the Periſtaltick Motion of the Bowels is ſlower, whereupon the Excrements are retarded in their Deſcent.

ON

PART I. ON the contrary, the joyous Paſſions, if they be exceſſive, are attended with Conſequences equally as dangerous; for they fail not to enforce all the animal Motions of the foregoing Organs, in a moſt violent Manner, which often create burning Fevers, Pluriſies; and, if the Conſtitution be naturally very bilioſe, a temporary Madneſs neceſſarily enſues, from the ſudden Expanſion and extreme Rarefaction of the Animal Fluids, following upon the Surprize, that excited the Paſſion.

FROM daily Experience we diſcover, that the Mind has this Power of bending, or unbending, of contracting or dilating its Faculties, according as it is affected with Objects more or leſs agreeable or diſpleaſing; and theſe Swellings and Subſidings of the Soul, in the forming of any Paſſion, if they happen to crack thoſe noble Springs of the Brain, on which the fineſt Senſations depend, fail not to put an entire Stop to all the Motions of the Animal Machine, as not ſeldom happens in great and ſudden Guſts of either Joy or Grief.

GIVE

Two Instances of the fatal Consequences of the Passions of Joy and Grief.

Give me leave here to remark two very surprising Instances, concerning the Power of these opposite Passions over human Nature, when indulg'd to Extremes. Mrs. *Davise*, a Lady of consummate Virtue, was so sensibly touch'd with excessive Joy, upon suddenly hearing of the Return of her Son from the *Indies*, that the Passion was too big for her Soul to struggle with, which, in a Moment, discoucerted all the animal Springs, and put an everlasting Stop to all their Motions.

And as the Passion of Joy is capable of Elevations above all the Bearance of human Nature, so its opposite Passion Grief is sometimes attended with Consequences not less fatal, as will appear from the Case of that unfortunate Lady Mrs. *Chiswell*, who was so extremely affected with Sorrow, at the Departure of her Son for *Turky*, that she expir'd that very Moment, she was about to withdraw her Hand from a parting Farewel.

It is remarkable, that both these Ladies were, in a very high Degree, subject

to

PART I.

to the Vapours; and that the Spirits, upon the Riſe of the Paſſion, ſuddenly rarefying and expanding above their natural Standard in the former, and being too much contracted or depreſſed beneath their natural Standard in the latter, were the real Cauſes, why theſe two unfortunate Ladies ſo ſuddenly expir'd under the Violence of theſe oppoſite Paſſions.

I think it is an allowed Maxim amongſt the moſt learned of our Divines, that there is a different Propenſity, Inclination, and Force, impelling us to divers Vices, in different Individuals; that is, that the Degrees of conſtitutional Temptations are different in different Subjects. Whence, I pray, ariſes this different Impulſe of the Inclination? Does it immediately depend on the Force of the intellectual Powers, or on the Appulſe of the Object made on the different Structure of the Fibres? On the different Structure of the Fibres, certainly, that excites the Impulſe on the Mind, and renders the Deſires to any Object more or leſs preſſing.

To conclude: From the foregoing Arguments it clearly appears, that all thoſe uneaſy Senſations, that ariſe, in any Paſſion, from the Want of an abſent Good, or at leaſt, from our Senſe of that Want, are owing to the different Structure, Mechaniſm, and Modulation of the Fibres; and as the greateſt Impulſe will ariſe in bilioſe Conſtitutions, ſo theſe ought firſt, and above all others, to take great Care not to give in too much to any vicious, cuſtomary Habits; for they will ſtrongly improve upon the Conſtitution, and be found difficult to forego, from the inexpreſſible, uneaſy Senſations, that will continually ſolicit their Return. And I am myſelf perfectly acquainted with ſeveral of this Complexion, that will ſooner forego the greateſt Tranquility in Life, than part with theſe Habits, when once they are become cuſtomary; ſo ſtrongly does Appetite prevail over Reaſon, Health, and the Welfare of the Body.

## CHAP. VII.

### *Of Senſation in general, and the Structure, Mechaniſm, and Modulation of the Nerves, neceſſary to produce Senſation in Animal Bodies.*

THAT the ſupream intellectual Faculties receive their Powers of Action, from the Laws of Matter and Motion, while the Soul reſides in this Animal Machine, I think appears evidently clear from the Reaſonings and Arguments of the foregoing Chapters. I ſhall now go on to diſcover, as well as I am able, how all our Senſations are communicated to the Underſtanding, by the Mediation of bodily Organs; that is, how the Materials of all our Knowledge are tranſmitted to our Thoughts, by means of the Nerves, and the Mechaniſm of theſe curious Inſtruments neceſſary to produce theſe Senſations.

That the Nerves are the Inſtruments of Senſation.

INDEED, that infinitely better Part of us, the Soul, would be but little, or not

at

at all, concern'd for the Sufferings of the Body, were it not liable to be affected with all thoſe Pleaſures or Pains, that tended to its Health or Sickneſs; but it could not be affected with thoſe Senſations of Pleaſure and Pain, were it not for thoſe fine Threads, the Nerves, that every where ſtrike the Mind with the Idea of Senſation, upon the Application of any Object. CHAP. 7.

Now as we perceive every Fibre of the Body to be affected with the Senſe of Feeling, ſo cannot we conceive how this feeling Faculty can ever be lodg'd in the Fibre, that is, the nervous Syſtem, as a Bundle of fine Cords curiouſly interwove, can perceive nothing apart from the Mind; if you divide a Nerve, the Part it is diſpos'd to, will immediately loſe all Senſation, unleſs ſome other Branch furniſh it with a Slip; however, it will be depriv'd of all Senſation it deriv'd from the former Nerve. It is plain then, that the Body feels not, but the Soul; and that it has pleas'd the divine Author of our Nature to communicate to certain Fibres, ſo and ſo modulated, a Power or Capacity of tranſmitting the

Ideas

PART I. Ideas of all Objects, that enter by any of the Senſes to the Underſtanding. This Capacity of the Fibres, in the Tranſmiſſion of Objects, we call Senſation, and theſe Senſations are furniſh'd to the Mind, from a certain Modulation of fine, white, pellucid Chords, we call Nerves.

Of the Origin of the Nerves, and their Diſtributions.

IN Diſſections, upon viewing theſe fine Fibres, that are the Inſtruments of Senſe, Motion, and Strength in Animal Bodies, we perceive that they derive their Origin from the Brain, *Cerebellum*, and *Medulla Spinalis*; and are not originated from the Heart, as *Ariſtotle* falſly taught his Followers. There are ten Pair, that ariſe within the Scull, whoſe Fibres are diſplay'd upon the ſeveral Organs of the four Senſes, *viz.* Viſion, Hearing, Taſting, and Smelling. The reſt are thirty Pair in Number, which ariſe from the *Medulla Spinalis*, that, in their Deſcent down the Spine, come out from between the *Vertebræ* of the Neck, Back, and Loins. Theſe vertebral Nerves give to every Point of the Body, where they come, a moſt ſenſible Idea of Touch, which

which would be inexpreſſibly affecting, were not their Senſations ſomewhat abated by a fine carnous *Parenchyma*. CHAP. 7.

NOW, theſe different Modulations of the Nerves, by which different Senſations are produc'd in the Body, depend on certain Motions of their *Machinulæ*, that affect each other, in every Contact of the Object; by which Contact the Senſation is propagated to the Seat of the common Senſorium; for all Senſation is only the different Impreſſion of Objects apply'd to the Nerves differently diſpoſed to receive their Appulſe; as we ſhall more clearly diſcover, when we come to diſcourſe on the ſeveral Organs of the Senſes, and the Modulation neceſſary to tranſmit different Objects, or the Objects of different Senſes, to the Underſtanding.

THE Mind, as we have in the foregoing Chapters obſerv'd, ſits as an Arbiter or Judge, capable of being affected with divers Objects from without; the Admiſſion of Objects from without, is by Means of the Nerves ſerving any of the Senſes, which immediately convey the

PART I. Ideas to the Understanding, by Means of the common Sensorium.

Of the common Sensorium, or that Point of the Brain, where all the sensible Nerves terminate.

THIS common Sensorium, I take to be that Point of the Brain, where the Ideas of all Objects terminate, immediately before they affect the Mind; that is, where all Objects make their last Impressions, immediately before the Soul receives them from corporeal Organs: So that the common Sensorium, according to my Apprehension of this dark and intricate Subject, seems the Soul's Presence-Chamber, or the Ending of Matter, and the Beginning of Thought; or, that I may express myself in Terms as little ambiguous as possible, that Point of the Brain, where all the Nerves serving Sensation, receive their Origin; or that Point of the Brain where the several Ideas unite, before they affect the Mind with one uniform Perception: For the Objects we view with both our Eyes, would appear double, did not the Optick Nerves, that convey the visible Species of Objects, unite in a Point, before they approach the Center of the common Sensorium; nor would fewer Inconveniencies attend the Objects of

of Hearing, were the auditory Nerves to penetrate the Seat of Senſation in two Canals; for then, upon either of 'em being from any Cauſes relax'd more than the other, there would follow a Diverſity of Sounds; and the Impreſſions entering the Ear, by the relax'd Tympanum, would not be much unlike the Sound of an Echo, with this Difference only, that it would be duller, and ſomething ſlower. CHAP. 7.

BUT here a Queſtion very fitly ariſes, and that is, How we can conceive the Brain to be the Seat of Senſation, when its Fibres are acknowledg'd to be void of all Senſe? To this I anſwer, that neither the Brain, Nerves, or any other Fibre of the Body have any Senſe of themſelves, but only as they receive it from the Mind.

Now the Reaſon why the Brain is deſtitute of all Senſation, is, becauſe its Fibres are naturally too much relax'd; and they are naturally too much relax'd by the Providence of Nature, that they might not be ſuſceptible of thoſe inexpreſſibly acute Senſations, to which they had been liable to be affected with, from

The Reaſon why the Brain is deſtitute of all Senſation.

PART I.

the immediate Preſence of the Mind, had they been more contracted or ſcrew'd up to an equal Degree of Tenſity with the Nerves themſelves; for then, every the ſlighteſt Paſſion of the Mind, or Affection of the Body, muſt have endanger'd the Animal Machine with Convulſions; from thoſe extremely acute Senſations, the Impulſe would have ſtruck upon the Fibres of the Brain, in every Contact of the Object; but, more eſpecially, from the Impreſſion of thoſe Objects, that raiſe the moſt ſenſible Paſſions.

WHILE the Nerves of the Animal Machine continue juſtly modulated, or braced, according to the regular Standard of Nature, the Mind will perceive itſelf perfectly at Eaſe, and free from all Manner of Pain and Uneaſineſs. But ſome, perhaps, may ask, How ſhall we know when this Animal Machine is exactly braced and modulated, agreeable to the exact Standard of Nature's Laws? and what are the mechanical Powers on which that Modulation depends? To which I anſwer, That the Mind perceiving itſelf perfectly at Eaſe, will be the cleareſt Indication,

dication, that the ſeveral undulating Fi- CHAP. 7.
bres are acceeding neareſt to the Balance of Nature; for it's impoſſible that any Organ of the Reaſoning Inſtrument can be out of Tune, but that the Mind will perceive it; ſo that, upon theſe Grounds, we have a Standard to go by, or a Director to inform us, whenever this Syſtem of Matter and Motion is any Way affected; and, not only ſo, but this thinking Being is capable of pointing out the very Part it perceives primarily affected, which ſtill gives us the greater Aſſurance, that a Diſeaſe ſubſiſts in the Body.

INDEED the Author of our Nature has ſo ſurprizingly contriv'd the Harmony of the human Fabrick, that the Mind and Body ſhall equally ſuffer under all the various Circumſtances of Life; ſo that if the bodily Organs be faint, weary, or any ways diſconcerted in their Springs, the Mind perceives their Affection, and is affected with the Change. Now the Queſtion is, Whether the Force made uſe of for the Recovery of theſe Diſorders, acts upon the Body or Mind? And from all Obſervations, it moſt certain-

PART I.

ly appears to act upon the bodily Organs; for, by raising the Contraction of the Arteries, we, at the same Time, increase the Circulation of the Blood, raise the Beating of the Pulse, the Motion of the Heart, and quicken the Secretion of the Animal Fluids, whereby all the Senses are revived, the Faculties dilated, and the Soul itself chear'd, by those fine, soft, undulating Motions, that the Fibres, thus assisted, strike upon the Passions.

Of the Mechanism of the Nerves necessary to produce Sensation.

Now, in Order to produce Sensation in the Organs of animal Bodies, it is not only necessary, that the several Parts be endued with nervous Fibres, brac'd or strung to a certain Degree of Tensity; but that these Nerves be capable of a peculiar Modulation, on which the Action and Harmony of Contact may depend.

To this End, Nature has furnished those fine Fibres, ordain'd for the Office of Sensation, with numberless, small, papillary *Machinulæ*, that, in every Sensation, from the Application of any Object, should vibrate on each other, and by that Means convey the Idea to the Seat of the common Sensorium.

rium. Now if it ſo happens, that an Object is apply'd to any Organ, when its Fibres are too much relax'd, which they are capable of from divers Cauſes, and conſequently their papillary *Machinulæ* ſet at too great a Diſtance from each other, it will neceſſarily follow, that either there will be no Senſation at all, as often is the Caſe under Palſical Affections, or at leaſt it will be greatly impair'd, as often happens under thoſe Stupors or Numbneſſes, that ſometimes affect the ſeveral Members under a depraved Senſe of Touch. CHAP. 7.

On the contrary, if theſe ſmall *Machinulæ* of the Nerves happen, from any Cauſes, to be too much contracted, that is, drawn up nearer to each other, than is conſiſtent with a regular Standard, the Senſation of that Part or Organ will be increaſed, and the Idea of Pain communicated to the Seat of the common Senſorium; for Pain only ariſes from too great Tenſion put upon the Fibres of any Organ; and this Tenſion cauſes a Contraction of thoſe papillary *Machinulæ*, that forms the Fibre, and theſe Contractions excite the Idea of Pain; but if theſe

PART I. Contractions be greatly increaſed above the Standard of Nature, they then produce Convulſions, or convulſive Motions, which, in ſome Caſes, wholly deſtroy the Ideas of both Pain and Senſation, as generally happen in the Epelepſy, and more violent Convulſions of the Brain; and, indeed, in all Caſes wherever the *Machinulæ* of the Fibres, and more eſpecially of the Nerves, are either too much contracted, or relax'd, there the natural Senſations will be either too much increaſed or leſſen'd.

THE Degrees of Contact, or Touch, therefore, muſt depend upon the nearer or remoter Diſtance, that the *Machinulæ* of the Nerves are placed to each other; for the leſſer the Spaces are between each *Machinula*, the eaſier and quicker is the Mind ſtruck with the Image of the Object; and conſequently the leſſer will be the Vibration neceſſary to convey the Idea to the Underſtanding; for the Impreſſion of Contact, or a Touch of the Object, being made on the papillary Glands, at the Ends of the nervous *Machinulæ*, the Jar, Twang, or Oſillatory Motion, conveying the ſame

must either be continued through the whole Length of the Fibre, till it reaches the Underſtanding, or elſe no Idea of an Object can be perceived to enter the Mind; and hence it follows, that if any of theſe *Machinulæ* happen to be either too much contracted or relax'd; that is, if the Balance of Equality, or that proper Point of Diſtance, whereby they excite a Perfect Senſation, happen, from any Cauſes, to be diſconcerted, then Senſation in general will be but ſlowly perform'd; and if this be natural to the State of the Body, we call ſuch, dull, heavy, ſtupid Perſons, when all the Dulneſs is in the Incapacity of the Organs, and not any ways imputable to a Defect of the Mind. CHAP. 7.

But, as there may be Senſations where the Ideas are painful or deprav'd; ſo may there be others, where the Mind is affected with pleaſurable Ideas; theſe ariſe from all Objects that raiſe eaſy Motions, that gently vibrate on the Nerves, whereby the Jars or Twangs of the papillary *Machinulæ*, againſt each other, in every Contact of the Object, exceed not Nature's Laws: And this is the Reaſon, why,

PART. I.

why, ſome Times, the Ideas of paſt Actions are ſo lively repreſented to the Underſtanding, that Perſons of a fine and delicate Turn of Fancy, are ſo ſenſibly affected, that they can ſmile, laugh, and be agreeably diverted, tho', perhaps, the Scene was tranſacted ſeveral Years before.

From whence ariſes that Variety in Mens Capacities and Endowments.

We perceive a vaſt Variety in Mens natural Capacities and Endowments; from whence, I pray, ariſes this natural Difference, but from the natural Structure, Mechaniſm, and Modulation of the Fibres, that compoſe the ſeveral Inſtruments of Senſation, whereby the Perception of Objects, that come in by any of the Senſes, is more or leſs clear? And this Perception of Objects, when it is natural, we call the natural Towardlineſs, Genius, or Diſpoſition, by which the Perſon ſo endow'd is more aptly diſpoſed to learn; and theſe good Diſpoſitions ariſe from any of the Senſes being more open to the Impreſſions of Objects; that is, from the Inſtruments of any particular Senſe, being finely ſtrung to a juſt Medium.

AND if we deſcend to conſider the Circumſtances of the Blood neceſſary to produce that Ingenium, Promptneſs of Expreſſion, or Facility of Wit, which ſome Men are ſo remarkable for, above others, we ſhall perceive it to ariſe from the Arteries and Nerves naturally tenſe, from Blood and Spirits eaſily moveable: And hence it follows, that Perſons of a fine, thin Texture, whoſe Conſtitutions are little fleſhy, are generally more agile, quick, in their Apprehenſions, and what we call witty, than any other Habit of Body; for, in this Caſe, the Juices, and eſpecially the animal Fluids, will be more readily diſpoſed to ſecrete; and conſequently the Ideas of Objects ſtruck on any of the Senſes with a ſtronger Impulſe.

To confirm the foregoing Reaſonings, I ſhall beg Leave to take Notice of the different Degrees of Senſation incident to affect *Infants, and very old People; and why both theſe States of Life are leaſt ſuſceptible of the Impreſſions of Objects. Infants, or very young Children are not capable of retaining the Ideas, that affect any of their Senſes, becauſe thoſe fineſt Fibres

*Vid. page 46. 47. 48.

of

PART I. of the Brain, on which the Senſations depend, are yet unfolded; nor do they open before they have made ſome conſiderable Progreſs in Years, and conſequently the Ideas that come to the Mind, through any of the Senſes, are ſoon eraz'd upon the Diſappearing of the Object; and this is the Reaſon why Children are ſcarce able to recall any Thing to Mind, before they are advanced into the third or fourth Year.

OLD Men, indeed, retain their Ideas long, becauſe their Memories are very tenacious of what they have got by Experience: And hence we diſcover the Reaſon, why very old Men will diſcourſe in a very agreeable Manner, upon former Tranſactions, even after all the Avenues of the external Senſes are contracted, and ſhrievel'd up by Age, and the Diſeaſes incident to affect them in the latter Periods of Life. This Power depends on the Force of the internal Fibres of the Brain, which excite theſe Perceptions in our Thoughts, and decay not ſo readily, as thoſe Fibres that ſerve the Inſtruments of the external Senſes, and which retain their mechanical Powers,

often

often, a long while after all the external Avenues to the Mind, are entirely oblite rated and block'd up.

Of the Difference between Senſation, Perception, and Reflection.

To me, their ſeems almoſt as great a Difference between Senſation and Perception, as between Perception and Reflection; as will, I believe, appear very clear to any Perſon, that duly conſiders the Signification of theſe different Words, and the diſtinct Ideas they are made to ſtand for: For Reflection is only a Power in the Mind, by which it revives any former Perceptions. Perception is a Power, by which the Mind perceives any Senſation lodg'd in any particular Organ of the Body; ſo that Senſation precedes Perception, almoſt in the ſame Manner, that Perception does Reflection, only the former is more inſtantaneous: And if it be ſaid, that there can be no Perception, where there is no Senſation; I anſwer, neither can their be any Reflection, where there is no Perception. Theſe three Powers of the Mind are entirely depending on each other, and all on the due Modulation of the Fibre; ſo that where there is no Senſation, there will be no Perception,

and

PART I. and of Conſequence no Reflection; but although there can be no Perception where there is no Senſation, yet if the Mind perceives itſelf differently affected in different Organs, by the ſame Impulſe, that will be ſufficient to ſupport the Diſtinction. This Confounding of theſe different Ideas ariſes from our not ſufficiently attending to the Objects, that enter by any of the Senſes, which certainly make a different Impreſſion in the Parts affected, from what it is in the Mind, perceiving that Affection.

SENSATION, therefore, I take to ariſe from the Application of any Object to the Surface of the Body, that is capable of affecting it with its Impulſe.

PERCEPTION I call a Power in the Mind to apprehend the Senſation lodg'd by the Contact of Bodies in any of the ſenſible Organs, whether it be in the Hearing, Seeing, Taſting, Feeling, or Smelling Senſe; Senſation, therefore, is in the Part affected, Perception in the Mind perceiving the Affection.

CHAP. 7.

BUT a Queſtion here neceſſarily ariſes, and upon which the Learned have very much divided; and that is, Whether theſe Senſations, that are excited in the Organs, from a Contact of the Object, owe their Origin to a Vibration of the Nerves, or are the Effects of fine animal Spirits, which, by their undulating Motions, impreſs the Idea upon the Mind?

Whether Senſation depends on fine animal Spirits, or Impulſe, or a Vibration of the nervoſe Fibres.

IN order to reſolve this Queſtion, in the cleareſt Manner, it will be neceſſary, in the firſt Place, that we conſider the Uſes and Ends, for which Nature has deſtin'd certain Organs, Veſſels, and their Liquors. Now it's evident, that what the Stomach is to the Chyle, That, the Arteries are to the Blood, That, the fine Glands and Nerves of the Brain are to the animal Fluids; and as the firſt diſſolves the Meats, and changes them into a fine Chyle, ſo the Arteries change the new receiv'd Chyle into Blood, ſo the fine Glands of the Brain and Nerves, by their oſcillatory Motions, change the Blood into a fine animal Fluid, fitting to nouriſh their Subſtance, whoſe Excrement or Superfluity

is

PART I. is discharg'd, by the cutaneous Emunctories, in the Form of Perspiration.

So that, from this Mechanical Way of Reasoning, it clearly appears, that the several Digestions, or Motions, which the several Organs, impress on the ingested Meats, from their first coming into the Stomach, to their going off by Perspiration, are only intended to divide their Particles fine enough to nourish the several Parts, through which they are secreted; and if so, then it follows, that the animal Fluids are destin'd to nourish the Nerves, and keep up that proper Elasticity, necessary to produce Sensation in animal Bodies.

If, indeed, we grant it more reasonable, that Sensation should depend on fine animal Fluids, which, by their undulating Motions, might impress the Ideas of Objects upon the Understanding, or its Faculties, yet still it would follow, that the Nerves would be the chief Instruments of Conveyance of those animal Spirits; and that their Motions, Impulses, and consequently Sensations, must depend upon their proper Stricture.

IT is incumbent, therefore, on these Gentlemen, that endeavour to support Sensation, upon the Motion of fine Animal Spirits, that they first inform us, from whence these Fluids receive their Impulse, that give them those quick Turns and Returns, to and from all Parts of the Body: If they say, from the Nerves; then a proper Enquiry will arise, *viz.* whether it will not be more reasonable, from the Nature of the Animal Motions to determine the Sensation rather to arise from the principal Cause, than the Effect, rather from a Vibration of the Nerves immediately communicated, from the Impulse of the Object, to the Seat of the common Sensorium, than from fine Animal Spirits, whose Motions are purely the Effects of these Vibrations.

AGAIN, if we should admit the Cause of Sensation to arise from fine Animal Spirits, undulating through the Nerves; yet, upon Abatement of any Sensation, whether it be in the Instruments of Vision, Hearing, or the Faculty of Feeling, it will be proper to recover the natural

PART I. Elaſticity of the Nerves, in order to revive the Senſation.

I COULD illuſtrate this Point much more clearly, were I to go on and explain the Nature of involuntary Motion, the Manner how any Muſcle or Organ is involuntarily contracted under convulſive Diſeaſes, and the Cauſes of that involuntary Contraction: But as theſe are Subjects foreign to my preſent Purpoſe, my Deſign being only to treat of the Senſations and Motions of Animal Bodies, ſo far as they relate to the Nature and Cauſe of the Spleen, Vapours, and Hypochondriack Melancholy; ſo I ſhall wave their farther Proſecution, and proceed to conſider the Nature of Senſation in particular, the Structure, Mechaniſm, and Modulation of the Fibres, neceſſary to ſtrike theſe particular Senſations, upon the Organs of Animal Bodies, and give the Mind a Perception of the Object.

CHAP.

## CHAP. VIII.

### *Of the particular Senſations: And firſt of Viſion, Light, and Colours.*

IT has pleaſed the divine Goodneſs to render the Soul receptive of Impreſſions, through certain Inſtruments, which, when rightly diſpoſed, are capable of tranſmitting all Objects, from without, to the Underſtanding.

THESE Organs, or Inſtruments, in a more appropriated Uſe of the Words, we call the Senſes, which are five, *viz.* the Hearing, Seeing, Taſting, Smelling, and Feeling. Other Organs, than theſe, the Soul has not; nor any other Inlets to convey Ideas to the Mind, which is the Reaſon, why our Knowledge of Nature and of Things is ſo ſcanty; and why we are ſo unable to penetrate any great Way into their abſtruſe Qualities, and diſcover the real Cauſes of their Connexion and Exiſtence.

PART I.

Now, as Vision is the most considerable of all the Senses, so I shall consider the Structure and Mechanism of this curious Organ, and the Modulation necessary to transmit Light and Colours, and all other visible Objects, that enter by the Eye, to the Understanding.

THAT Ornament of the *English* Nation, Sir *Isaac Newton*, has so fully demonstrated the Phænomena of Colours, as they arise from the different Textures, Positions, and Surfaces of Bodies, whereby they are impower'd differently to refract the Rays of Light, and give a different Colour to divers Objects, that, I think, it will be needless to attempt a farther Explanation upon these Subjects. I shall, therefore, go on to discover, upon the same Principles, the Structure of the Eye, the Mechanism and Modulation of the several Coats and Humours that compose this curious Organ, and the Requisites necessary to convey these several Phænomena of Light and Colours to the Understanding, in a Way different from what has hitherto been attempted. For tho' distinct Vision depends upon a Mathematical

thematical Exactneſs, in the Diſtance and Arangement of the Coats and Humours of the Eye, whereby the Image of the Object may be reflected upon the Retina; yet, unleſs the Structure of the Fibres, the Motion and Secretion of the Humours, be juſtly adapted to convey the Appulſe, it's impoſſible there can be any diſtinct Viſion, or Admiſſion of Objects to the Underſtanding: So that all the viſible Beauties in Nature, or that Viſibility they receive from our optical Organs, will appear as one univerſal Blank to the Mind, notwithſtanding the Ball of the Eye may be finiſh'd in geometrical Proprotions. CHAP. 8.

THIS will afford the beſt Light into the Nature of Viſion; the Manner how the Organ of the Eye is naturally affected with Light and Colours; and how it comes under the Spleen, Vapours, and Hypochondriack Melancholy, to be ſo highly perverted and impair'd.

THERE are four Circumſtances abſolutely neceſſary to produce the Senſation of Viſion in Animal Bodies, *viz.* Light,

PART I. Objects, a Medium, and Organs rightly disposed, in the Patient, to receive their Impression.

The Rise, and Progress of Heat, Light, and Colours.

ALL Motion, arising from the Attrition or Collision of Bodies, produces Heat; and Heat is Fire invisible, which demands nothing more to make it be visibly perceiv'd by the Eye, but that the Rapidity of its Motion be sufficiently increas'd to enflame the Matter; and all visible Light is only the Corpuscles of Fire set at too great a Distance to burn: Not that it is absolutely necessary, that there should always be Light, where there is Heat or Fire; because, in some dense Bodies, the Corpuscles of Light are so imprison'd in the Particles of Matter, that they do not become luminous or visible, unless the Parts be exceedingly agitated.

THE Difference, therefore, between Light and Fire, is this; That the latter is only the Corpuscles of the former more minutely divided by the Velocity of their Motion, which renders them infinitely more powerfully penetrating; so that we have no Matter in the Universe, so compactedly

pactedly close, into whose Pores this active Body will not insinuate itself. CHAP. 8.

THAT Light is only Fire, whose Corpuscles are set at too great a Distance to become inflamably hot, will appear evidently clear from this Experiment; That if you, by the Assistance of good Glasses, unite or contract, into a Focus or Point, an infinite Number of these Rays of Light, they will become so exceeding hot, as to fire or enflame every Thing within the Sphere of their Activity.

AND, as Light is Fire, whose Particles are naturally too languid in their Motion to burn; so Heat destitute of Light, is only Fire invisible, which demands a greater Rapidity in the Motion of its Corpuscles to produce it into Flame: So that Motion produces Heat, and from Heat encreas'd arises Light, and Light condens'd produces an actual Fire, as appears from the foregoing Experiment made with Burning Glasses.

LIGHT, therefore, is only the Rays or Streams of a most subtile Æther, put into a Of Light.

PART. I. rapid Motion, which occaſions a luminous Brightneſs in its Corpuſcles. The greater or leſſer Rapidity of their Motion depends on the greater or leſſer Degrees of the Sun's Power, by which the greater or leſſer Degrees of that luminous Brightneſs is perceived.

Of the Sun-Beams, and their different, Original Colours.

IF the Rays immediately proceed from the Sun's Influence, it is call'd a Sun-Beam: Theſe Beams are of divers Colours, according to their different Magnitudes, which give different Appearances to different Objects, accordingly as their Surfaces are differently diſpoſed to refract the Rays of different Colours; which is the Reaſon, why one Object appears blew, another red, and a third Green, *&c.* and why ſome particular Objects appear of divers Colours, which ariſes from the Rays being compounded.

Of Compound Rays, and the different Colours they produce.

COMPOUND Colours, ſuch as Purple, ariſe from the Texture, in the Surface of the Object, being able more powerfully to reflect the red and blew Rays into the Medium, whereby the Mind is affected with

with that Colour; while moſt of the other colour'd Rays are ſplit into a thouſand Diviſions by their Refractions, and loſt to our Senſes. CHAP. 8.

Of the different Shades of Colours.

As Colours, therefore, cannot be perceived without Light; and as they are only the different colour'd Rays, ariſing from the Surfaces of thoſe Objects, capable of reflecting certain determin'd Rays, and not others; or, at leaſt, not in that Quantity capable of overpowering the former; it neceſſarily follows, that the ſeveral Shades of Red, Yellow, Green, and Blew, from the paleſt to the deepeſt, from the lighteſt to the darkeſt, muſt neceſſarily depend upon the Rays of the ſovereign Colour overpowering all the Rays of the other colour'd Rays, in a Proportion anſwerable to the Paleneſs or Deepneſs of the Shade: So, for Example, in reflecting a pale Blew, it is neceſſary that all the different colour'd Rays ſhould be reflected from the Surface; but the compound Rays of Red, Yellow, Green, *&c.* in a leſs Proportion than the Blew, which is to be the Baſe of the Colour: For it is Sir *Iſaac Newton*'s Obſervation, that

PART I. that a Reflection of all the Rays produces a light Colour, or what we call Whiteneſs in the Object, as, from ſeveral Experiments, that learned Gentleman has clearly demonſtrated, in his admirable Treatiſe on Opticks. And in compounding the different Shades of the ſame Colour, it is always neceſſary to mix a Proportion of White, in order to ſtrike the Shade of a lighter or deeper Dye; and they that make Powder-Blew, know very well, that a Mixture of Starch and Indico, will ſtrike what Degrees of a Blew in the Colour you pleaſe, accordingly as you differently proportion the Mixture of thoſe Ingredients.

BUT in vain does Light and Colours offer themſelves to the Underſtanding: In vain does the Underſtanding itſelf endeavour to comprehend the Nature of Viſion, and judge of the Variety of Objects thus ſet before it; if there be any Defect in the Organs of the Eye: Theſe Defects will be ſufficient to deface the Beauties of the Creation, and give an univerſal Blank to the whole Book of Nature.

CHAP. 8.

Of the Structure of the Eye.

IN order, therefore, to furniſh this curious Organ with proper Inſtruments of Conveyance, Nature has gifted to the Eye, Veins, Nerves, Arteries, and Lymphæducts, from which is expanded the ſeveral Tunicks, and the Humours contain'd therein. Theſe fine arterial and nervous Fibres, terminate in Glands, that ſerve for the Secretion of theſe Humours, brought thither both for the Nouriſhment of the ſeveral Coats, and to aſſiſt the Eye in Viſion.

EVERY Fibre, therefore, that goes to the Compoſition of theſe curious Membranes, obtains a certain Oſcillatory Motion, whereby the ſeveral Humours and their Secretions are preſerved in their natural State and Order.

Now the Tranſparency of the vitrean, chriſtaline, and other Humours of the Eye, by which the Ideas of Objects are, more clearly, let in upon the Soul, ariſes from the moſt natural Springyneſs of the optick Fibres; and which are only Expanſions of the fine Threads of the optick Nerve and artereal Fibres, that,

PART I.

by their Oſcillatory Motions divide the ſeveral Humours to the higheſt Degree of Fluidity they are capable of; for all tranſparent Bodies, or Bodies capable of reflecting Light, the more they are divided, the more copiouſly they reflect thoſe Rays; as clearly appears from the ſimple Experiments of pounding a Piece of brown Candy in a Mortar, or from the different Degrees of Heat employ'd in diſtilling the ſame Liquor, which gives it different Degrees of Tranſparency.

The Reaſon, why Cats, Owls, and Bats, ſee Objects in a Medium, undiſcoverable by the human Eye.

AND hence we diſcover the Reaſon, why Cats, Owls, and Bats, enjoy the Object of Viſion, or Light, in a higher Degree, than any rational Being. I have had an Opportunity of diſſecting a Cat's Eye, and perceive, that all the Humours are more divided, more clear and tranſparent, than in thoſe of the human Eye, which enables them to ſee Objects in the Dark, or in ſo great an Abſence of Light, as would ſeem dark to us: For any Body, that will view a Cat's Eye, in the darkeſt Night will perceive it luminous to a very ſurprizing Degree, and, upon any great Dilatability of the Pupilla, almoſt frightful.

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THIS luminous Brightneſs, in a dark Night, is greatly increaſed, if the Cat be a good Mouſer, and you hold a Mouſe or Bird within the Scent of her Mouſers; for then ſhe will greatly dilate the Pupilla, whereby this luminous Glare will be more conſpicuous; for, upon her perceiving Objects of this Kind, the Fibres contract with greater Vigour, the Spirits move with a greater Velocity, and conſequently are more plentifully ſecreted in the ſeveral Tunicles of the Eye; whereupon they appear more bright, luminous, and tranſparent.

The Corpuſcles of Light have a poſitive Exiſtence, and are not annihilated in the darkeſt Night.

NOW, we are to conſider, that the Corpuſcles of Light, have a poſitive Exiſtence, and do not looſe their Being, upon the Departure of the Sun, from our Hemiſphere, even in the darkeſt Night. Their Appearance, indeed, from the Rapidity of their Courſe and Motion being abated, is greatly leſſen'd; whereby their Corpuſcles are brought ſo near each other from their attracting Principle, as not to be able to reflect ſo ſtrongly upon the Medium, as to be perceived by the human Eye, tho' they may, and doubtleſs

PART I. doubtleſs are, by Creatures, whoſe Pupilla is capable of a greater Dilatability; for it is the ſame Thing, in relation to Viſion, whether the Rapidity of the Motion be increaſed in the Corpuſcles, that compoſe the Rays of Light, or in the Humours of our Eyes; in either Caſe, there will be an Increaſe of Light let in upon the Mind.

Of *Will-with-Wiſp, Jack-a-Lanthron,* and other lambent Fires.

To prove this more clearly, we need only reflect upon the Degrees of Light, that often ariſe from ſulphurous Corpuſcles emitted from the Bowels of the Earth, whoſe Rapidity of Motion is ſuch, as often to produce a real Light or Flame, when the Rays receive not the leaſt Aſſiſtance from the Sun's Influence. And what are theſe lambent Fires, vulgarly called *Wills-with-the-Wiſp*, that gently glide before Travellers benighted, and are ſaid to lead People out of the Way, but theſe ſulphurous Corpuſcles, emitted from the Bowels of the Earth, and produced into Flame by the Rapidity of their Motion? that is, theſe Motions have a Power to make the Rays of Æther be enlighten'd, and, conſequently.

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perceiveable in the darkeſt Night, that could not be perceiv'd without the Sun's Influence, were it not for theſe Motions; and, if the Celerity and Motion of theſe Corpuſcles were but a little more increaſed, I queſtion whether they would not appear with a Glare equal, if not ſuperiour, to That of the Sun; and, doubtleſs, might overpower our Opticks, as much with the Blaze, as our natural Sunſhine obſcures the Eyes of an Owl, or other Bird of Night, under its fulleſt Meridian Splendor. CHAP. 8.

THIS, methinks, is a Demonſtration as clear as can be given, That the Rays of Light do not looſe their Exiſtence upon the Sun's Abſence from our Hemiſphere; but only that their Appearance becomes inviſible to the human Opticks, through a natural too great Contractility in the Pupilla to admit theſe Rays, unleſs their Corpuſcles receive a conſiderable Increaſe in their Motions, which ſo far divides them, that they then become viſible.

FROM the foregoing Reaſonings and Arguments on this Subject, I think it pret-

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PART I.

ty plainly appears, that the Matter, that conſtitutes the different or oppoſite Qualities of Light and Darkneſs, is the ſame; and that either the one or the other of theſe Qualities prevail more or leſs in our Hemiſphere, according to the greater or leſſer Agitation of its Corpuſcles.

The Matter of Light and Darkneſs the ſame.

FOR Light is nothing but the Streams of Æther put into an extreme Agitation, by the Power of the Sun's Influence, neceſſary to give them an Entrance thro' the *Pupilla*; and it appears from divers Experiments, that the * Points of Light, forming every Ray, move circularly upon its Axis; and the Affection we call Light, ariſes from the different Degrees of Motion in theſe Points. In abſolute Darkneſs the Corpuſcles move extremely ſlow; but whether there be any ſuch Thing as abſolute Darkneſs, wherein not any Animal perceives the leaſt Degree of Light, is a Queſtion above the utmoſt Stretch of my Philoſophy to determine.

* By the Points of Light, I mean the Corpuſcles of Light, ſo exceeding ſmall, as almoſt to eſcape the Imagination; the ſame is to be underſtood of the Points of Matter, wherever they occur in this Diſcourſe.

NOW, thus, the Organ of the Eye acts, or is acted upon, in Viſion, eſpecially when the Fibres of its ſeveral Coats

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are not obſtructed, or impair'd, by any Accidents, that may intercept the Tranſmiſſion of Objects to the Underſtanding. The Rays of Light, of Colours, and of Objects, that come within the Sphere of Viſion, paſſing through the *Pupilla*, are, by the Aſſiſtance of the chryſtalline Humour, painted on the *Retina*. This *Retina* is compos'd of the ſmalleſt Filaments of the Optick Nerve, which are finely diſplay'd on the back Side of the glaſſy Humour. The Images or Ideas of all Objects, that enter the Eye, act upon this Organ by their Impulſe; this Impulſe excites a Motion in the Optick Nerve, that illumines all the Points * of the Brain concern'd in Viſion, which are all the Points of the Brain that go to the forming the Optick Nerve. This enlightening of the ſeveral Points of the Brain, and more eſpecially of that Point where the Soul reſides, ariſes from the Vitrean, Chryſtalline, and other Humours, reflecting all the Points of the Object, upon a certain Point of the *Retina*; and hence it follows, that the Object receiv'd by the Underſtanding, will



* Points of the Brain, ſignify the ſmalleſt Corpuſcles of Matter, that compoſe its Fibres.

PART I. be the Image reflected on the *Retina*, which will be more or less clearly perceiv'd, in Proportion to the Degrees of Impulse, in Proportion as the several Humours are more or less clearly secreted, and in Proportion as the Optick Fibres are more or less finely display'd upon the *Retina*.

FROM the foregoing Arguments and Reasonings upon this Subject, it plainly appears, that the Clearness of our Conceptions, in Relation to Vision, very much depends on the due Stricture and Modulation of the Optick Nerve and Artery; and this is the Reason why this Faculty, in some curious Surveyers of Art, is naturally so strong, and surprizingly exact, so that they, from a transient View of any curious Piece of Painting, shall discover Beauties or Blemishes, that would pass undiscover'd by others less attentive to the Exactness of Symmetry and Proportion.

THIS exact Judgment of Beauty, or of the Symmetry and Proportion of Parts, en-

entirely depends on the Soul's ſeeing through a more tranſparent Medium, which ariſes from the greater Brightneſs and Reſplendency of the ſeveral Humours, whereby the Images in View are reflected back upon the Soul, or at leaſt its ſupream Faculties, with all their natural Perfections or Deformities. CHAP. 8.

AND here I cannot but take notice of thoſe Diamond Eyes, thoſe ſtarry Brilliants, that blaze, and fire, and enflame the Soul with thoſe killing Motions, that, like a Baſilisk, wound at a Diſtance, and kill unſeen. Theſe *Ardentes Faces*, as *Philoſtratus Lemnius* wittily expreſſes thoſe ſparkling Eyes of the firſt Water, which, from the Quickneſs, Vivacity, and Briskneſs of their Motions, render ſome Ladies ſo wonderfully captivating, that its highly dangerous for mortal Man to come within the Sphere of their Commotion. And hence ariſe thoſe glowing Heats, thoſe inflammatory Paſſions, whereby we are ardently impell'd to purſue Objects often fatal to our Peace. Now theſe ardent Impulſes, or Inclinations, are always in Proportion to the Violence of

PART I. the Paſſion, and this Violence of the Paſſion to the Briskneſs of the Motion, ſtruck on the Seat of the common Senſorium, which is always in Proportion to the natural Beauties of Objects, or thoſe natural, ſurprizing Beauties, they are made to diſplay on Optical Organs, rightly diſpos'd to receive their Impreſſion.

THUS far as to the Clearneſs and Diſtinctneſs of Viſion, which leſſens, in Proportion, as this due Stricture and Modulation of the Optick Nerve and Artery either abates, or is over-intended; for if it ſo happen, that theſe fine Fibres are, from any Cauſes, impair'd in their Springs, then the Impulſes they make on the included Humours, will be more languid, the Motion of the foreſaid Humours ſlower, and conſequently leſs divided; upon which their Corpuſcles will be viſcid, will leſs powerfully refract the Rays of Light, and the optick Nerve conſequently impart a duller Perception of the Object to the Underſtanding. And hence ariſes the Cauſe of thoſe Films, Motes, and little Specks of Darkneſs, that ſometimes affect the Humours of the Eye, and either

ther intercept, or, at leaſt, very much impair the Action of Viſion, under the Spleen, Vapours, and Hypochondriack Melancholy. 

On the contrary, if the ſame Inſtruments are over-intended, that is, if their Fibres are too ſtrongly contracted, then the Motions of theſe Humours will be accelerated, their Corpuſcles too much divided, from whence ariſe *Opthalmia*'s, and other Inflammations, that viſibly affect the *Tunica Conjunctiva*, or White of the Eye; and which proceed only from its Blood-Veſſels over-extended, from a Glut of Juices charg'd upon the exterior Coat of this curious Organ.

## CHAP. IX.

### *Of Hearing, Sounds, and Harmony.*

Sound is a Word that ſtands for every Perception, that is immediately convey'd to the Underſtanding, by the Organ of the Ear. And therefore I think

PART I. it will not be improper, if I firſt ſpeak a Word or two concerning the Structure, Mechaniſm, and Modulation of this curious Organ, neceſſary to produce theſe Perceptions in the Soul, before I proceed to conſider the Doctrine of Sounds, and the Laws to which they are ſubject, in their Propagation.

That there is a Senſe in Sounds, and a Reaſon in Muſick, which gives to the Soul thoſe exquiſite Pleaſures in Harmony.

FOR the Mind is delighted no otherwiſe with Sounds, than as the Soul perceives the Beauties of Harmony through the Aſſiſtance of thoſe Organs, appropriated by Nature for their Conveyance; and there is a peculiar Senſe in Sounds, that delights the Soul; nor can we perceive, that harſh, inharmonial Sounds have any Influence to move the Soul, or create thoſe pleaſing Raptures that ariſe from the former. Hence it follows, that there is a Reaſon in the Harmony of Muſick, as far as inarticulate Sounds are capable of being underſtood, from their ſeveral Cadences, tallying with each other; and it is this Reaſon or Senſe of the Tune, that gives to the Soul thoſe exquiſite Raviſhments, that ſo ſtrongly move the Paſſions of Perſons, highly delighted

delighted with the Harmony of Muſick. To facilitate, therefore, this Hearing of Sounds, or noble Harmony of Muſick, Nature has given to Mankind an Inſtrument of Conveyance, which we call the Ear; and though it is form'd of divers Muſcles, Bones, and Membranes, that compoſe its Structure and Mechaniſm, yet I ſhall only take Notice of the two principal Inſtruments that fit this curious Organ for the Senſation of Sounds, which are the Drum and Auditory Nerve, finely diſplay'd on all Points of the internal Ear. CHAP. 9.

Now had the ſeveral Fibres of this Nerve been diſplay'd on every * Point of the Drum, in the ſame Manner that the Optick Nerve is on the *Retina*, then Sounds had made a different Impreſſion on this Organ, from what we perceive; and Whiſpers could not have been heard, becauſe of the Diſtance of the auditory Nerve from the external Ear.

* Point, when applied to the Surface of Bodies, ſignifies a Space ſo exceeding ſmall, as is almoſt impoſſible to imagine.

AGAIN, had the Drum been, immoveably, fix'd on the *Os Temporale*, then all Sounds that by their Violence ſhake Hou-

PART I.

ſes, as the Peals of Thunder, and the Roaring of Cannon, muſt neceſſarily have broke the Tympanum, and for ever have deſtroy'd the Faculty of Hearing; but it has ſeveral Muſcles and Bones, that aſſiſt its Action, either in contracting or relaxing its Fibres. In all Whiſpers theſe Fibres are contracted, whereby the Sound is render'd more ſenſibly acute: In great Sounds, that may endanger the breaking of the Tympanum, theſe Fibres are relax'd, by which the Degrees and Force of the Sound is very much abated.

Definition of Sound.

SOUND, therefore, ſimply conſider'd in itſelf, is nothing more than a tremulous Motion, or impulſive Wave, ariſing from the ſounding Body, propagated through a Medium, and communicated by the Ear, to the Seat of the common Senſorium.

THE Air is that Medium, on which the Waves of Sound move, and which is alter'd in Proportion to its greater Rarity or Denſity, as will clearly appear to any one, that will ſuſpend a little Bell in the glaſs Receiver of the Air Pump, which will

will emit different Degrees of Sound, according as the Air is more or leſs exhauſted out of the Receiver.

THE Perception of the Report of Sounds, depends on the right Modulation of the auditory Nerve, and its being fitly diſplay'd on the ſeveral Points of the *Meatus Auditorius* and Drum of the Ear.

THIS right Modulation of the auditory Nerve ariſes from the *Machinulæ* of thoſe Fibres, that compoſe this Nerve, being brac'd to the exacteſt Degree of Tenſity, whereby they are neither too much contracted, nor relax'd, and conſequently clear of all Obſtructions that any Way may intercept thoſe fineſt Airs of Sound, from being convey'd to the intellectual Faculties.

NOW, that the Increaſe or Decreaſe of Sounds depends as much upon the due Modulation of this curious Organ, as the different Denſities of the Medium, in which they are propagated, is evident; for upon the Tympanum being either too

PART I.

too much contracted or relax'd, through overmuch Heat or Moiſture, the Sound will be either too acute or flat, and conſequently, in both Caſes, deviating from its natural Standard. The former Caſe often happens upon Inflammations of the Ear, or after great Fevers, that ſo criſps or drys the Nerves, that the Hearing is acute even to a Fault. Nay, upon ſcrewing up the auditory Nerve to a very high Elevation, you may augment the loweſt Sounds, that they ſhall be heard equal to a Peal of Thunder, or the Roaring of a thouſand Cannon, all diſcharged in the ſame Moment. On the Contrary, from a too great Relaxation of the nervous Fibres, theſe Sounds ſhall be ſo obtuſe, as ſcarce to be perceived: And hence ariſe thoſe different Jarring Sounds, thoſe ſinging Noiſes in the Ear, that moſt People complain of, that for any conſiderable Time have labour'd under the Spleen, Vapours, or Hypochondriack Melancholly.

Of the Senſe and Reaſon of Sounds which is different from the Force of Sounds.

I KNOW that ſeveral Perſons have taken a great deal of Pains to diſcover the Harmony, Conſent, and Agreement, that there

ſeems

ſeems to be between the Objects of Viſion, and thoſe of Sounds; but here I ſhall purſue the Argument upon more noble Motives; and beg Leave to obſerve, that there is a Senſe in muſical Sounds, or a Reaſon which depends on the Exactneſs of the Compoſition; for all Tunes pleaſe the intellectual Faculties, only as they are grounded on the Proportion of Sounds, more or leſs mathematically exact; and, for this Reaſon, the Force of Sounds is to be diſtinguiſh'd from the Harmony; which is Reaſon in Perfection.

Definition of Tune.

So that Tune is a rational Syſtem of Sounds form'd to pleaſe the Ear, and they pleaſe the Ear no otherwiſe, but as they pleaſe the Soul, and they pleaſe the Soul, only as they are harmonical, that is, reaſonable; for the Rationality of Sounds depends on their different Modifications, whereby they are enabled to pleaſe; for in a Propoſition of Words, as well as Sounds, if they are not plac'd in a regular Order, the Mind will preſently perceive the Falſhood of the one, and Inharmonicalneſs

PART I.

nicalneſs of the other, which is the Falſehood of Tune.

AND hence it appears, that there is the ſame inſeparable Connexion between a true Propoſition in Words, and a true Propoſition in Sounds: Both have their peculiar Connexions, Proofs, and Demonſtrations, whereby their Truth or Falſehood is diſcovered; ſuch a Conſent and Agreement there is between the Senſe of Words and the Senſe of Sounds, which is their Tune; ſo that to ask, why we are pleaſed with Muſick; is, in Effect, to ask, why we are pleaſed with Knowledge.

Sounds cannot move the Paſſions, but as they move the intellectual Faculties.

INDEED, it is ſaid, that Harmony, or the Melody of Sound only acts by raiſing or depreſſing the Paſſions. But I deſire to know, how it is poſſible to raiſe or depreſs the Paſſions, but by affecting the intellectual Faculties, that is, the Faculties of the Mind; for the Paſſions, as I have already obſerved, are only irregular Motions, that ariſe from a Conflict between the Animal Fibres and the Animal Powers of the Soul, from Objects ſtruck on the Seat of the common Senſorium;

rium; so that its impossible to conceive, how these finest Strokes of Musick could ever move the Mind, to move the Passions, if there were not Beauties in the Harmony of Sounds, analogous to the highest intellectual Reason; by which the intellectual Faculties are so surprizingly affected. CHAP. 9.

THESE excessive Elevations, and inexpressibly pleasing Raptures, that so sensibly affect the Spirits of those that are remarkable for a fine Taste in Musick, all depend upon the Fibres, and are owing to a fine Displaying of the auditory Nerve upon the Tympanum, and other Parts of the Ear; for if the Drum be either too dry or moist, that is, if these little *Machinulæ* that compose the Fibres of this curious Membrane, be either too much contracted or relax'd, then Part of the finest tremulous Oscillations will be lost in the Medium; and though the Mind may perceive the natural Sound, yet, for want of these finest Strokes, much of the Reason or Harmony will be abated.

THIS

PART I.

THIS Enquiry, perhaps, may let us into the Myſtery, why ſome are naturally more expert Judges of Harmony than others, and diſcover the Reaſon, why ſome are all in Raptures at a well play'd Conſort, while others ſhall ſit by without the leaſt Emotion. This Difference, I am ſure, does not altogether depend on the Knowledge of Theory; tho', doubtleſs, that Knowledge, like all other rational Knowledge, may greatly aſſiſt in increaſing the Perception; for the Queſtion is, whether there is not a natural Difference in the Ears of different Perſons, as to their Perceptions of Harmony in a well play'd Conſort? that is, whether ſome of them will not be much more elevated with the Force of Sounds, though they are equally ignorant of the Theory of Muſick.

I MUST confeſs, indeed, that this peculiar Perception, by which the Mind is naturally enabl'd to judge of the exquiſite Fineneſs of muſical Airs, without being inſtructed in the Theory, is only given to a few: And, if we conſult different Climates, we ſhall perceive that this Faculty

Faculty is moſt improv'd in the Southern Parts of the World ; where, through the Kindneſs of the Clime, the People are naturally Muſicians ; and this is the Reaſon why *Italy* and *Naples* are ſo much careſs'd by all thoſe that are remarkable for a fine Taſte in Muſick. CHAP. 9.

No Body can deny but that Muſick is capable of raiſing or falling the Paſſions in a very ſurprizing Manner. The Writers of Antiquity ſtory of *Alexander* the Great, that even he, that conquer'd the World was himſelf vanquiſh'd by *Tymoleon*, and could not withſtand the Force of his Viol : So that this Muſician, in a Manner had him in his Power, and could make him rage or calm, ſedate or furious, juſt as he was pleaſed differently to modulate the Strings of his Fiddle. And if the Emperor of the World could thus be fiddl'd out of his Senſes by the Almighty Power and Energy of Sound, I think, it would not be improper ſometimes, to try its Force upon thoſe Diſeaſes, that are ſuppoſed to have a very great Dependance on the Mind ; (as the Hypochondriack Melancholy,) and diſcover, whe-

*Alexander* the Conqueror of the World, conquer'd by Muſick.

PART I. whether it is not poſſible, by its Impulſes, to work a Change in thoſe fineſt Nerves and Animal Fluids, that are too ſubtle to come under the Influence of the choiceſt Medicines.

## CHAP. X.

### *Of the Taſte, Touch, and Faculty of Feeling.*

VISION and Sound require ſome Diſtance to make their Objects be diſtinctly perceived; but Contact or the Faculty of Touch demands the immediate Application of an Object, to ſome particular Organ of the Body. If this Application is made to the Tongue, it is called Taſting; if to the Noſe, Smelling; if to any Part of the Surface of the Body, we call it Feeling; and is that Faculty by which we diſcover the different Degrees of Hardneſs or Softneſs in Bodies.

THE

CHAP. 10.
Of Tasting.

THE fineſt Organ of Touch is the Tongue, which is diſtinct from the ordinary Senſe of Feeling, as clearly appears from the different Structure, Figure, and Mechaniſm of its papillary Glands, whereby it is enabled to convey that Variety of Reliſhes to the Mind in Taſting; for this Organ, from its different Senſations, may well be called a double Senſe, ſince it both diſcovers the different Impreſſions that Bodies, by their different Figure and Motion, are impower'd to make on this Organ; (that is, their different Sweetneſs, Bitterneſs, Saltneſs, &c.) and alſo their different Degrees of Softneſs and Hardneſs, which is common to it with the Touch.

From whence the different Senſations of Pleaſure and Pain ariſe.

THE different Senſations of Pleaſure and Pain, in Relation to Contact or Touch, ſeem, to me, to ariſe from the different Degrees of Force or Motion, with which the Contact is apply'd; for it has pleaſed the divine Goodneſs to render the ſeveral Fibres ſuſceptible of Pleaſures or Pains, according to the different Degrees

PART I. of Motion apply'd to the Surface of the Body; or according to the different Stimulus, with which theſe ſeveral Motions affect the Parts.

AND here I cannot but obſerve, that the ſeveral Degrees of Senſibility, with which we are affected by this Faculty of Touch, are owing in a great Meaſure to the Diſtance of the Senſation from the Brain, abating for the different Thickneſs of the Skin in different Parts, and the different Quantities of Fat, or a Parenchyma heap'd up in divers Organs, to abate thoſe too exquiſite Senſations they receive from the Nerves.

WERE not our Organs thus modified, we ſhould not be able to bear the different Changes of the Weather; the Alterations of our Diet would affect us with Pains inſufferable to our Natures: This appears from any Part being excoriated, and expoſed to the bare Contact of the Air; how ſenſible is that Part of its Impreſſions?

OUR divine Benefactor, therefore, has ſo ſurprizingly temper'd the Conſtitutions of our Bodies, with an inſenſible viſcid Parenchyma, that they are thereby render'd capable of better enduring the Impreſſions of Accidents that ſurround them; ſo that, as the Mechaniſm of our Organs are fram'd, it requires ſome Force, from external Objects, to put us to Pain, which, had they been deſtitute of this Fence, every the lighteſt Touch, muſt have affected them in a moſt ſenſible Manner.

AND, as Things are now conducted in the Animal OEconomy, we ſhall, upon due Reflection, diſcover, that different Parts are ſuſceptible of different Degrees of Pains and Pleaſures, as appears from thoſe active Senſations that ariſe upon ſlightly touching the Roof of your Mouth with a Feather or your Finger, which draws all the adjacent Parts into Spaſms, that, if the Titulations are purſu'd, often end in downright Vomiting.

PART I.

EVERY Body almoſt is ſenſible of the exquiſite Senſations that ariſe upon tickling the Soals of the Feet with any ſoft Body. In ſome delicate Conſtitutions, a Vibration is ſo ſenſibly ſtruck on the Brain, as to bring the whole nervous Syſtem into convulſive Motions. This was the Caſe of an unfortunate young Lady, whoſe Companions, in their Play, tickled the Soals of her Feet ſo long, that ſhe fell into Convulſions, which kill'd her upon the Spot.

The Organs ordain'd for the Propagation of our Species, the moſt ſenſible Parts in the Body, and why.

BUT among all the pleaſing Scenes of Nature, there is nothing ſuperiour, nothing equal, nothing alike, or that comes near thoſe wonderfully ſurprizing Senſations, that ariſe from a Touch of thoſe Parts, ordain'd by Nature for the Propagation of our Species. It demands the utmoſt Force of Fancy, the higheſt Flights of Imagination, and the moſt towering Genius, to comprehend the Reaſon of theſe inexpreſſible pleaſing Senſations, that depend on the Structure and Mechaniſm of theſe Fibres, thus curiouſly interwove; and to

to discover, how those finest Touches that thus highly elevate the human Soul, are transmitted to the Brain, and struck on the Seat of the common Sensorium.

GIVE me Leave here to go on, and point out the hidden Springs of these mysterious Motions: Nothing will I say, offensive to the chastest Ear, nothing inconsistent with the most reserv'd Modesty.

THE Nerves that produce these wonderful Changes, and most delicate Sensations in the Animal OEconomy, are most finely display'd on the Organs destin'd by Nature for the Office, Use, and Secretion of these Parts. By Mycroscopes, it appears, that the Filaments of these Nerves are most minutely divided, and their *Machinulæ* set at the least Distance from each other, which is the Reason, why they are most sensibly affected with the finest Touches, from the smallest Impressions of the Object, and why the Action is so inexpressibly pleasing.

In thoſe agreeable Tranſports, ariſing from the Action of Organs thus finely modulated, all Nature is in a Ferment; the Blood boils, the Pulſe flutters, and the very Imagination is raviſh'd with Extacy. But as ſuch noble Cauſes produce Effects very great in their Conſequence; ſo, if we would enjoy a ſound State of Health, and preſerve a vigorous old Age, ſhould we, but ſeldom, taſte ſuch delicious Morſels, leaſt their too frequent Repetition impair the Conſtitution, and bring on thoſe Weakneſſes, Impotencies, and Gleets, more difficult to cure, as well as more waſting to the Conſtitution, than thoſe that ariſe from Venereal Taints.

The Beneficent Author of our Nature has fix'd the Office of thoſe noble Organs, at ſuch a peculiar Diſtance from the Brain, that an Impreſſion moſt exquiſitely ſenſible ſhould be ſtruck on the Mind, upon every Contact of the Object. Had

thoſe

thoſe Parts, that miniſter to theſe delicate Senſations, been ſeated a little nearer the Brain, in the ſame given Circumſtances we now enjoy them; thoſe pleaſing Touches, would have been above the Bearance of human Nature, and endanger'd the whole Frame of the Animal Machine, every Time we converſed with a fine Woman, from thoſe too exquiſitely ſenſible Impulſes, the Nerves would have ſuffer'd in the Conflict. CHAP. 10.

HAD they been plac'd at a greater Diſtance from the Seat of Senſation; then the Stimulus had been ſo faint and languid, as ſcarce to awaken Mankind into a Deſire of propagating their Species; So that this exceeding Senſibility of theſe Organs is intended to keep warm the Inclinations, leaſt the Sexes in their moſt degenerate State, ſhould attempt to fruſtrate theſe noble Ends of their Being.

WE perceive, even now, the Imagination heighten'd to a ſurprizing Degree, even more than the Conſtitution

PART I. can well bear, in ſome warm, bilious People, without very great Emotions; and in hotter Climates the Senſations are ſtill more ſenſible, which, doubtleſs, was the Reaſon, why the ſovereign Author of our Nature was pleaſed to enjoin to the *Jews* the Rite of Circumciſion, that the moſt ſenſible Part being continually expoſed to Accidents, might thereby be leſs ſuſceptible of theſe pleaſing Senſations; and conſequently the Mind leſs prone to theſe debaſing Actions, that are ſo apt to vitiate our Thoughts, and enervate the Conſtitution.

AND here I cannot but obſerve, that the Riſe of Luſt is immediately from the Fibre, nor is capable of Extinction; for the Humours of a human Body being ſecreted, according to the Laws of Nature, that is, according as the Veſſels unfold; and the Veſſels unfolding in Proportion as the Perſon advances in Years; it naturally follows, that Infants and Children are incapable of this Paſſion, becauſe their Veſſels ſcarce ever unfold, under

der our Climate, before the thirteenth or fourteenth Year; but as ſoon as they begin to unfold, then the Juices drilling down the ſpermatick Arteries, and being ſecreted by the Teſtes, produce a new Stimulus, that tranſmits a new Senſation to the common Senſorium, which furniſhes the Mind with a new Idea, we call Luſt; and this Luſt is only a Perception of the ſame Idea in the Mind, that is, a Senſation in the Organ; ſo that the Fibres that help forwards the Secretions, on whoſe Stimulus theſe fineſt Senſations depend, muſt be firſt in Motion, before the Mind can perceive the Idea of Luſt; for they occaſion the Senſation, of which the Luſt is only the Effect.

How the Conſtitution comes to be enervated from a too eager Purſuit after venereal Pleaſures, may be worth our while here, a little to enquire; for I am fully perſwaded, that they ſeldom or never ariſe from an Abuſe of the Marriage-Bed; and I lay it down as a fundamental Propoſition moſt certainly true, That were all

How the Conſtitution comes to be enervated, from a too eager Puſuit after venereal Pleaſures.

PART I. all Men as good as they ſhould be, and never debauch'd their Conſtitutions with any lewd Women, before they convers'd with their own Wives, that then all Women would be pleas'd, and Men themſelves moſt highly pleaſed in pleaſing them; and thoſe Perſons that cannot, by a virtuous Abſtinence, render theſe delicate Senſations always agreeable, always pleaſing, and always new, are highly unfit for the chaſte Embraces of the Marriage-Bed.

AWAY with thoſe Men, therefore, that tell us, that theſe Senſations are common to us with Brutes: I deny that they are common to us with Brutes; for as far as the Reaſon of Man is infinitely ſuperior to the moſt ſublime Senſations of Brutes, ſo far does this Senſation in Man, infinitely excel that of Brutes. Brutes have this Senſation no farther, than that the Stimulus or Propenſity, may overbear their Inclinations, rather to this than any other Action: But in Man it is ſtruck with the moſt ſurprizing

Im-

Impulſe, whereby it is able to over-bear the nobleſt of the intellectual Faculties themſelves. And this is the Reaſon why a very pious and learned Judge, was pleaſed to declare, *That there was no Reaſon beneath the Girdle;* that is, no *Reaſon in the Head of the ſharpeſt Reaſoner, ſtrong enough to overpower thoſe Reaſons, that ſpring from this Senſation. And hence ariſe thoſe delicate Senſations that Men naturally enjoy, that are endued with a fine Taſte for Women; and which, as a Gentleman was pleaſed to expreſs himſelf, uplifts the Imagination to the higheſt Pitch, that Mortal Minds can ſafely ſoar: But

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* Miſtake me not, I am no Advocate for a lawleſs Liberty: I only attempt to diſcover the Power and Force of this Senſation in Man, above what it is in Brutes. I would rather die a thouſand Deaths, than preſcribe any Liberties, inconſiſtent with the Laws of the Marriage-Bed; or that may tend to give any Toleration to thoſe Monſters of Men, whoſe libidinous Inclinations, neither the Laws of God or Nature can reſtrain.

PART I. But when the Mind is thus high uplifted, the leaſt higher Impulſe would crack thoſe noble Springs, diſconcert the Animal Faculties, and put an everlaſting ſtop to all their Motions.

THESE Weakneſſes, Wrenches, and Sprains that often attend the vicious Purſuit of thoſe lawleſs Pleaſures, certainly ariſe from all the Animal Fibres being elevated to a ſurprizing Degree, above their natural Standard; from a too great Expanſion and Dilatation in the Motion of the Animal Fluids following on thoſe Degrees of Elevation; and from the Mind itſelf, or at leaſt its nobleſt Faculties, being ſurprizingly agitated upon thoſe Swellings and Conflicts of the Spirits.

FROM the Animal Motions thus highly agitated, the Nerves muſt neceſſarily, in Time, be too much relaxed, and their *Machinulæ* ſet at too great a Diſtance, from each other, ever after eaſily to be reduced to their proper Standard

Standard again: So that these Parts of Consequence, will lose their proper Springs, their proper Actions and natural Sensations: Upon which they will become cold, frigid, and incapacitated for Action, in the same Manner as if they actually labour'd under a palsical Indisposition. CHAP. 10.

I COULD here go on, and discover how the Workings of those finest Fibres, that excite these exquisite Sensations, improve the Constitution of the Stomach, Spleen, Liver, Intestines, the Brain, and whole Habit, from the Consent, and Agreement, that all these fine Organs have with each other from the sixth Pair of Nerves; but that would be diving too deeply into these Mysteries of Nature, and discloſing those hidden Springs, that might prove of dangerous Consequence to vulgar Capacities.

GIVE me Leave here to conclude this first Part by recapitulating, as briefly

PART I. ly as I can, the Reaſonings and Arguments of the foregoing Chapters.

WE have obſerv'd, that the Mind is a Principle depending on itſelf; That it is capable of Motion and Thinking. When theſe Motions and Thoughts are irregular, they conſtitute the Paſſions; That the Inſtrument of the Paſſions, is that Medium that conjoins Matter and Thought; That the Nerves are that Matter on which the Mind immediately diſplays its Influence, by the Mediation of a fine ſubtle Animal Æther: The Mind, therefore, cannot alter the Circulation of the Blood, but as it firſt alters the Motion of the Paſſions, that immediately affects the Nerves, going to the Heart. Thoſe Nerves, thus affected, alter the Motion of the Heart itſelf; the Motion of the Heart thus affected, alters the Motion of the Arteries, the Motion of the Fluids, which conſequently gives a different Beating to the Pulſe.

HENCE it follows, that the Pulſe beating languid, and low, and feeble, is a ſure Indication, that the Circulation of the Blood is languid, and low, and feeble; That the Contraction of the Arteries, is languid, and low, and feeble; that the Beating of the Heart is languid, and low, and feeble; and, conſequently, that all the Secretions made from the circulating Maſs, (the Senſations, Paſſions, and intellectual Faculties themſelves not excepted,) are languid, and low, and feeble. CHAP. 10.

AND, in fact, we perceive this Train of Conſequences, the juſt Workings of Nature, and an evident Demonſtration, that all the Parts of the Animal OEconomy, the Intellectual Faculties themſelves not excepted, are depending on the Fibres; and that all the ſeveral lower Faculties, receive Pleaſure or Pain, Joy or Grief, juſt as the Arteries are elevated or depreſſed in their Motions above or beneath the Standard of Nature. So that here we have the juſt Proceedings of Nature, in judging

PART I. ing of the different Senſations of Animal Bodies, in Relation to their being under the Influence of either Pleaſure or Pain, Joy or Grief, and Health or Sickneſs.

*The End of the Firſt Part.*

# A NEW SYSTEM OF THE SPLEEN, VAPOURS, AND *Hypochondriac* MELANCHOLY.

## PART II.

### CHAP. I.

### *Of the Certainty of* THEORIES *in relation to the* Practice *of* PHYSICK.

THUS far we have clearly discover'd, that the Motions of the Mind, and its Faculties, are purely Organical; that is, that the regular Exercise of the Understanding depends on the Well-being of the animal Fibres, wherein it

CHAP. I.
The Design of the first Part.

reſides; and which the Mind has a Power to employ in regular or voluntary Actions; and, farther, we have attempted to diſcover the Nature of theſe ſeveral Ideas that enter by any of the Senſes; what they are in the Objects themſelves; in the Inſtruments that convey them, and in the Underſtanding receiving their Impreſſion.

THIS, I think, is advancing one Step further, in the Knowledge of our Thoughts, and is a clearer Explication of thoſe abſtruſe Phænomena, than to ſolve all by ſaying: It is the Rule of our Conſtitution; God Almighty has form'd us ſo and ſo; and ſubjected the Matter and Motion of our bodily Organs to the Obedience of our Thoughts, and the imperial Power of the Will.

The Deſign of this Second Patt.

IN this Second Part, I ſhall go on to conſider how theſe ſeveral Inſtruments come to be diſaffected under the Spleen, Vapours, and Hypochondriack Melancholy: What Alterations, in the Motions of the nervous Fibres, are neceſſary to diſconcert our Thoughts; the Symptoms, Phænomena, and Changes, that neceſſarily

rily enſue, in the Mind, upon theſe Diſ- CHAP. I.
affections; and the Grounds and Cauſes upon which they are ſupported; for, if either the Mind itſelf, or, to ſpeak more properly, the Organs by which the Mind acts, be diſconcerted, the Mind muſt neceſſarily give ſome Tokens of its Diſaffection, which, it could not give while thoſe Inſtruments continued under the regular Influence of Health.

INDEED the kind and beneficent Author of our Nature has implanted in every human Individual a Principle of Reaſon; whereby he might diſcover the Laws of Nature, as far as they concern his Conduct of Life: And as Diſeaſes are one of the greateſt Evils he can guard againſt, ſo is it the Buſineſs of the Phyſician to diſcover truly and certainly, on what Cauſes theſe are grounded, what Matter they conſiſt of, the principal Organs in which they are lodg'd, and how they may ſafely be eradicated without the leaſt Detriment to the Body; and whatever has hitherto been accounted the eſſential Definition of a Phyſician, I will venture to ſpeak

it in one Word; That he is beſt deſerving of that Character, that beſt knows how to cure Diſeaſes, and remove the Obſtructions, that embarraſs and over-turn the Motions of the animal OEconomy.

Of the Alterations and Changes that Diſeaſes neceſſarily infer upon human Bodies.

NOW it is impoſſible he can know, abſolutely and properly, how to cure Diſeaſes; unleſs he underſtands their Symptoms, Cauſes, the Principles on which they depend, the Progreſs they make, and the Alterations and Changes they infer upon the Conſtitutions of animal Bodies; and as all the Alterations, Symptoms, and Phænomena, have their Dependence entirely on the Changes that happen in thoſe external, obvious, ſenſible Qualities, we call the Temperatures of the Habit; and as thoſe external, obvious, ſenſible Qualities, of Heat, Cold, Dry, and Moiſture, are dependent on the Motions of the Solids and Fluids, and alterable from their different Degrees of Impulſe; ſo it follows, that all Diſeaſes muſt neceſſarily ariſe from the Syſtem of the Solids and Fluids intended or remitted in their Motions, above or beneath the Balance of Nature; ſo will

it

it follow, that the different Degrees of Diſeaſes will always be attended with different Degrees of theſe Motions, which will infer different Changes in theſe external, obvious, ſenſible Qualities, in Proportion as the Motions are intended or remitted; ſo will it follow, that the peculiar Symptoms indicating the Height or Severity of the Diſeaſe, will be diſcoverable from the Intenſeneſs of theſe external, obvious, ſenſible Qualities: And thus we diſcover thoſe Starts and Contorſions that often involuntarily affect the Muſcles of the Countenance in divers nervous Fevers, which ariſe from the Violence of theſe Motions: and if it ſhould ſo fall out, that theſe external, obvious, ſenſible Qualities, ſhould retreat inwardly upon the Habit; yet, even here, the Pulſe will diſcover that Retreat; for it's impoſſible that the Qualities of Heat, Cold, *&c.* can retreat, but that the Motions will accompany them; or that the Motions can retreat, unleſs there be Obſtructions form'd inwardly upon the Habit; or that Obſtructions can be form'd upon any of the internal Organs, but that the Beating of

That every Phyſician, that attends to the Motions of Nature, has an intuitive View of the Cauſes as well as Symptoms of Diſeaſes.

PART II. the Heart muſt be enforc'd; or that the Beating of the Heart can be enforc'd, without the Variation of the Pulſe, becauſe the Beating of the Pulſe has an immediate Dependence on the Artery that goes to the Heart; ſo that in this very Caſe, which ſeems moſt remote from an intuitive Knowledge, the Pulſe will inform us, not only of this Retreat, but of the Degrees of Motion that attend it.

And that in the moſt difficult and perplexing Caſes.

THUS it moſt evidently appears, that we have the ſureſt Grounds to go upon, even in this moſt perplexing Caſe, where the external Habit changes its Temperature; which, I think, is as much as can be deſir'd in a Point acknowledg'd not ſelf-evident; though, after all, I muſt confeſs I cannot diſcover why it may not preſume upon as good a Title to Self-evidence, as any Propoſition whatever, ſince Self-evidence, in relation to natural Subſtances, conſiſts in nothing more than the Atteſtation, that all the Senſes give to the Properties of Bodies, that regularly fall under their Cognizance.

THE

In what Cases the Senses may be mistaken.

THE Senses, indeed, may be mistaken in judging of Objects, not properly apply'd to their View, or plac'd in an improper Medium, or at too great a Distance; but what every one in Health feels and sees, he certainly knows to be a Perception; and if I see and feel the Habit of the Body Hot and Dry, it is as evident a Demonstration to me as any Mathematical Problem whatever, that it is endu'd with those Properties I call Hot and Dry; and consequently that the internal Motions of the Solids are forcibly impress'd on the Fluids, the Secretions of the Juices accelerated, and the Blood greatly divided, which are all Properties absolutely necessary to make the Habit Hot and Dry.

THESE Changes in the external, sensible Qualities, upon a Change in the internal Motions of animal Bodies, therefore, give us an intuitive Knowledge of the Nature, Cause, and Symptoms of Diseases; which, as Mr. *Lock* very well observes, is the highest kind of Evidence our State and Condition is capable

of; and which ariſes from our Perceptions themſelves: than which, we cannot have any greater Certainty, that Things are what they are.

Of the Grounds of Certainty in Phyſical Enquiries.

IF, therefore, we accurately ſurvey any of the external, viſible Qualities in human Bodies; as for Example, Suppoſe the Conſtitution be Hot and Dry, and the Countenance high colour'd; is it not evident to the leaſt diſcerning Judgment, that the Solids are naturally ſpringy, tenſe, or elaſtic; the Impulſes ſtrong and quick, the Juices thin, ſharp, and eaſily moveable; whereby they are driven off from the Habit in greater Quantities, than in any other Temperature; which is the Reaſon why we denominate the Conſtitution bilioſe: If, therefore, under this Temperature, an obſtructed Perſpiration enſue, upon taking Cold, or any other Cauſe, will not a Fever of the Inflammatory kind naturally ariſe? and if ſo, will not Bleeding, and gentle, opening, relaxing Medicines be propereſt to appeaſe the Symptoms? for to attempt to enforce a Breathing will only increaſe the Fever.

ON the contrary, under lower Degrees of Heat, or when the Conſtitution appears Cold and Moiſt, is it not a certain Indication that the Motions are tending beneath the Standard of Nature, that all the Secretions are ſlower, the Impulſe of the Solids weaker and more languid; which forms the Conſtitution in general of a more lax Diſpoſition, than what was obſerv'd in the foregoing Temperature; and therefore, is it not natural to conclude, that this kind of Habit is inclinable to the Scurvy, Aſthma, or Dropſy; if not to ſome nervous Diſeaſe of the Palſical kind? for all Phlegmatic Conſtitutions are cold, and cold Conſtitutions produce the foregoing Diſeaſes, from the Abatement of their Motions, which often terminate in Palſical Affections.

AND thus, we arrive at the higheſt Degree of Certainty, in judging of the internal Motions and their different Degrees, from the external, obvious, ſenſible Qualities; for theſe Qualities always depend on the internal Motions, and are certain

Indications

PART II. Indications to what Height and Degree theſe inward Motions arrive.

THESE external, obvious, viſible, or ſenſible Qualities of Heat, Cold, *&c.* therefore, are of the ſame Conſequence to Phyſicians, that the Sea Chart or Compaſs is to Mariners; and as the latter informs the Sailor of the Courſe he is to ſteer, ſo the former directs the Phyſician to the cleareſt Indications, not only to diſcover the moſt abſtruſe Cauſes, but alſo to adminiſter a Cure in the moſt ſtubborn and perplexing Diſeaſes.

The Application of the foregoing Reaſonings.

TO apply all this Reaſoning to the Spleen, the Subject of our preſent Diſcourſe: Theſe external, ſenſible Qualities, do not only diſcover to us the different Degrees of Motions, but the Difference of Conſtitution depending on thoſe Motions, and the different Nature of Diſeaſes moſt liable to affect thoſe different Conſtitutions. And though no Conſtitution is ſo happy as to be able to plead an entire Exemption from the Spleen and its Conſequences, ſeeing all of us have, more or leſs, a Tincture of

it,

it, in our firſt Make and original Conſti- CHAP. I.
tution; yet ſome Perſons are much more naturally inclin'd to it than others. People of a Conſtitution highly phlegmatic, when they come to be harraſs'd with the Misfortunes of Life, or happen to meet with any ſudden Turn in their Affairs are moſt commonly ſubject to the Hypochondriack Melancholy: And this more-eſpecially happens, if they be naturally inclinable to black, gloomy, and diſmal Apprehenſions; their Thoughts full of penſive, abject Ideas; for thoſe deſpairing Intercourſes with Self, ſadden the Mind, damp the Paſſions, and conſequently depreſs the Motions of the fineſt Nerves, on whoſe Powers the Action of the nobleſt Faculties have their Dependance: And if we deſcend to examine the State of the Blood, we ſhall diſcover it naturally thick, heavy, and very unfit for the Secretions of the animal OEconomy.

ON the contrary, bilioſe Conſtitutions are ſometimes obſerv'd to ſuffer under the ſame Diſeaſe, from a very different Origine, for being brisk, vegete, and

airy

PART II. airy in Diſpoſition, their Paſſions naturally ſtrong, fierce, and greatly inclin'd to the Objects they contemplate, from the quicker Impulſes they ſtrike upon the Seat of the common Senſorium, it muſt neceſſarily follow, that their Minds will be unable to bear any ſudden Shock, that croſs upon their Affairs, without very great Emotions: And in all Caſes where the Paſſions are ſtrongly rebated, that is, meet with a Counter-Buff, in the eager Purſuit after Objects, there, the Motion of the Fibres upon the Recoil muſt ſink beneath their natural Standard; upon which the Mind itſelf will ſink or ſadden, or at leaſt appear to do ſo, according to the Perception of the Patient; and we often obſerve that Perſons the moſt chearful, gay, and vivacious in Converſation, when alone, are not without their frequent Intervals of ſad and gloomy Moments.

To conclude; As the well or ill Exerciſe of the Faculties depends entirely on the well or ill Exerciſe of the Organs ſerving theſe Faculties; ſo it naturally follows, that where-ever theſe Organs

are

are disconcerted in their Motions, the Exercise of those Faculties will suffer a Change, which will be attended with different Symptoms, according to the different Constitution of the Patient: And this is the Reason of those different Symptoms, that often arise, under the same Disease in different Habits; and why some People of a hot bilious Constitution, when they start from their Reason, in the Spleen, or Hypochondriac Melancholy, are raging, furious, and distracted to the last Degree of Madness; while others of a colder Temperature are incident to deep Cogitations, languid Thoughts, and to revolve long upon the most dejecting Ideas; which often terminate in the natural Melancholy Madness.

## CHAP. II.

### *Of the Reality of the* SPLEEN, VAPOURS, *&c. and the dangerous Conſequences that attend their Neglect.*

PART II. BUT in vain have we endeavour'd to diſcover that Diſpoſition of Body moſt liable to be affected with Spleen, Vapours, and Hypochondriack Melancholy; in vain have we attempted to ſupport the Cauſes of that Diſpoſition upon the different Temperature of the Solids, and the Cauſes of that different Temperature on the different Springineſs of the Fibres, that communicate a different Impulſe, Motion, and Secretion to the Blood and Juices: If, after all theſe Arguments, and Reaſonings upon this Subject, we muſt account of the Spleen as an imaginary Diſeaſe, that has no other Support than a wrong Turn of the Fancy.

CHAP. 2.

BUT, as, in the former Chapter, I attempted to discover the Difference of Constitutions, that, so greatly, diversify the same Disease in different Bodies; So, in this and the following Chapters, I shall endeavour to remove those vulgar Prejudices and Mistakes concerning the Nature of those Affections, by demonstrating the regular Progress of the Symptoms, and their fatal Tendency, when not prevented by timely Applications.

THE World, indeed, has been a long Time at a Loss to know what to make of those Disorders we call the Spleen, Vapours, and Hypochondriack Melancholy; nor have they been less puzzled to discover, under what Class of Diseases they might most properly range them. This is the Reason, why some Gentlemen, when they cannot reasonably account for those surprizing Phænomena that often arise in the Spleen, are so ready to resolve all into Whim, or a wrong Turn of the Fancy.

BUT

BUT if that Variety of Symptoms, that often affects the Body, under thoſe Diſorders, ariſe from a wrong Turn of the Fancy, I hope theſe Gentlemen will be ſo candid as to inform us, from whence that wrong Turn of the Fancy it ſelf ariſes, that is ſuppos'd to give Being to all thoſe Symptoms: For I deny, that the Thoughts themſelves can ever ſtart from a regular Way of Thinking, without inferring, at the ſame Time, a Change in the Motions of the Animal Fibres; whether the Object cauſing that irregular Turn of Thought, was primarily ſtruck upon the Mind, and ſo acted upon the Body, by firſt acting upon the Paſſions; or was firſt lodg'd in the Fibres, and, by affecting the material Organs, after that, diſconcerted the Paſſions: and after them, the Mind: I ſay, which way ſoever the Shock was received, it's impoſſible that the Mind can ſuffer, and the Body be unaffected at the ſame Time, *& vice verſa.* For, we perceive, in thoſe violent Paſſions or Tranſports of Anger, that are big enough to raiſe a temporary Madneſs, if, at the ſame Time, they do not

not disconcert the Animal Organs; upon the Abatement of these Motions, the Mind will naturally subside, settle, and recover its former State of Tranquility again; which is far otherwise, when the Organs, that support the Passions, are affected, for then the Madness or Discomposure holds on, and the Patient often continues under its Influence whole Nights and Days without the least Intermission.

How to judge of the Standard of Health.

The Criterion, therefore, by which we judge, when all the Motions of the Animal Fibres are regular; that is, when the Body is in a State of perfect Health, is discoverable from the natural Power of our Perception, which depends on the natural Course of the Humours, on the natural Secretions of the Juices, and on the natural Contraction of the Solids; for it's impossible, that any particular Secretions can be vitiated, but that there will be Pain and Uneasiness, or that there can be Pain and Uneasiness in any Organ, but that the Mind will perceive it. This Perception arises from the necessary Connexion, Consent, and Agreement, that all those fine Springs and Fibres, that compose

EVERY Change of the Mind, therefore, indicates a Change in the bodily Organs; nor is it poſſible for the Wit of Man to conceive how the Mind can, from a chearful, gay Diſpoſition, fall into a ſad and diſconſolate State, without ſome Alterations in the Fibres, at the ſame Time; for the relative Gravity of the Body, that is, what we call Lowneſs of the Spirits, is no otherwiſe increas'd upon theſe Changes, but as the Body weighs heavier to the Mind; nor is it poſſible that the Mind could perceive any Addition of Weight, if the Fluids did not move ſlower in the Veſſels, upon which their attracting Principle is increas'd to a Degree greater than is conſiſtent with a freer Circulation, and conſequently a regular Standard of Health.

Of the relative Gravity of human Bodies being increas'd upon the Abatement of their Motions.

FROM the foregoing Arguments, it clearly appears, thar whenever the Mind perceives itſelf uneaſy, low-ſpirited, or dejected, it is as full a Demonſtration, as the Nature of the Thing will admit,

that

that the Instruments, by which the Mind directs the Powers of its Operations, are affected; and this holds good, more especially if the under Faculties produce not their regular Effects, agreeable to the Determination of the Will. 

But I perceive here an Objection may arise to the foregoing Arguments. What, may some say, Do we not perceive Men to declare, that they cannot go, walk, nor stir, from the Place where they are fix'd, when Force has oblig'd them to walk? Indeed, I deny not, but that, by Force you may remove a dead Man from Place to Place, or to what Place you please; but can a Man under the Palsy of the whole Body, go, move, or walk? A Relaxation of the Glands of the Brain is of the same Consequence to the Mind, that a Relaxation of the Machinulæ that compose the nervous System, is to the Body; and as an Affection of the latter disables those Organs, where it happens, from regularly doing their Duty; so any Indisposition in the former, will disable the Mind from regular Thinking.

THE Body often could walk, if the Mind was able to direct walking; and the Reaſon why the Mind cannot direct walking, is, becauſe thoſe fine Glands of the Brain, its immediate Inſtrument, are affected. Now, in order to voluntary Motion, it is neceſſary, that the Mind ſhould be as free to direct, as the Will to obey its Direction, and the bodily Organs to execute the Directions of the Will; but if a Languor be in the Mind, through a Palſical Affection of the fine Fibres of the Brain, then the Mind will be unable to direct, the Will to obey the Directions, and the bodily Organs to execute the Determinations of the foregoing Powers.

IN vain, therefore, under theſe Circumſtances, do you expect Obedience to your Demands; you may as well bid a blind Man ſee, or a deaf Man hear, as bid one of theſe Wretches walk, till you have, with generous Medicines, removed the Preſſure, that chains him down to this dark and gloomy Way of Thinking. A Man perceives himſelf ſad, dejected, or low-

low-ſpirited, he takes a Glaſs of fine, generous Wine, which raiſes his drooping Spirits, and renders him alert, merry, and chearful: From whence this Change, I pray? Does the Wine immediately work upon the Mind, in order to produce this Alteration? No, certainly; but by firſt enforcing the Motion of thoſe Nerves, that ſerve the ſeveral Senſes, it enables the Mind to ſee the ſeveral Objects, that preſent themſelves to its View with greater Clearneſs; ſo true it is that the Diſpoſition of the Mind follows the Direction of the Fibre, and is elevated or depreſs'd, in Proportion as the nervous Syſtem is intended or remitted in its Motions, above or beneath the Standard of Nature.



It's impoſſible the Mind can perceive the Idea of Pain, unleſs there be a real Cauſe of Pain in the Body.

Upon theſe Grounds, then it clearly appears, that neither the Fancy, nor Imagination, nor even Reaſon itſelf, the higheſt Faculty of the Underſtanding, can feign a Perception, or a Diſeaſe, that has no Foundation in Nature; cannot conceive the Idea of an Indiſpoſition, that has no Exiſtence in the Body; cannot feel Pain or Uneaſineſs in any Part,

PART II.

unleſs there be Pain or Uneaſineſs in that Part: The affected Nerves of that Part muſt ſtrike the Imagination with the Senſe of Pain, before the Mind can conceive the Idea of Pain in that Part; and therefore, it is in vain to go about to perſuade any Man, that he is perfectly at Eaſe, while he, at the ſame Time, perceives himſelf in great Pain and Anguiſh from divers Affections of the Body.

Our Perceptions are certain Evidences of what we feel.

THESE Perceptions are certain Evidences of what the Soul really ſuffers from the Affections of the Body; and ſo long as it retains any Ideas, it certainly knows, that all its Perceptions, how irregular ſoever in the Objects that excite them, are real Impreſſions made on the Mind from the Organs of the Body; ſo that, to them it is, that we owe the moſt evident Demonſtrations of our own Beings, and of the Exiſtence of all other Things in the World without us.

And of our own Exiſtence and all other Bodies that exiſt without us.

BUT here, perhaps, ſome Perſons may be ready to object, that if our Perceptions be ſuch certain Indications of the Exiſtence of a real Affection in the Body, how

how comes the Patient ſo often miſtaken in judging of the Danger attending theſe Perceptions in this Diſeaſe. CHAP. 2.

The Perception of Pain different from the Perception of Danger.

To this I anſwer, that it ariſes from his confounding the Perception of Pain or Uneaſineſs, with the Perception of Danger, ariſing from that Pain or Uneaſineſs; and becauſe he perceives himſelf in great Pain, therefore concludes himſelf in great Danger. Now the Perception of Pain, is an Idea quite different from the Perception of Danger. The former always ariſes from real Cauſes, and is a certain Perception in the Mind, depending on the internal Symptoms of the bodily Organs: But the Knowledge of Danger is to be calculated from the Circumſtances of the Parts affected, that depend on a Chain of Conſequences, out of the Reach of the Patient to comprehend; ſo that, in all Caſes of the Spleen, we ought to diſtinguiſh between the Perceptions, and the Knowledge that accompany thoſe Perceptions. The Perceptions are always real Apprehenſions, from an intuitive View, that the Mind has of the Degrees of Pain and Uneaſi-

PART II. neſs, that, at any Time, affect it, thro' an irregular Impreſſion of the corporeal Organs; he, therefore, may certainly perceive his Pains and Uneaſineſſes to be what they are, without perceiving the Danger that attends thoſe Impreſſions, and which has nothing to do with thoſe Degrees of Perception. In a Word, every Perception of Pain, is a certain Indication that the Body is affected; but every Conſequence drawn from the Degrees of that Perception, is not a certain Indication of Danger; but muſt be judg'd of from the viſible Circumſtances of the Parts affected, and from the known Phænomena incident to affect the ſeveral Parts under this Diſeaſe.

EVERY one, therefore, will claim a Right to be Judge of his own Pains, and his own Uneaſineſſes, tho' he cannot of the Danger that accompany thoſe Impreſſions: And as no Man can transfer the Pains and Uneaſineſſes he labours under to another; ſo is it impoſſible that any Perſon can make another ſenſible, and conſequently judge of the Pains and Uneaſineſſes he labours under.

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THE Pains and Uneaſineſſes, therefore, are to every one what they conceive them to be; and we muſt calculate their ſeveral Degrees from the Complaints of the Patient, the Symptoms he labours under, the Nature of the Diſeaſe; and not, from any imaginary Whims and Notions of our own Brains, and conclude the Patient feels no Pains, becauſe we perceive none in ourſelves.

The Danger of treating real Diſeaſes as if imaginary, exemplify'd in the Caſe of Mrs. *J.*

I KNOW ſome Gentlemen, when they perceive a Diſeaſe untractable, and not eaſily yielding to the Force of Medicines, are very ready to charge it upon Spleen and Vapours; that is, according to their Acceptation of theſe Words, Whim and Fancy; but was the Caſe of Mrs. *J.* only Whim and Vapours, when ſhe was rallied out of a real Diſeaſe by a quacking Fellow, that aſſur'd her ſhe ſhould be well the next Day, tho' ſhe expir'd before Eleven of the Clock that Night; ſo that if ſhe was well, according to this Gentleman's Prognoſtication, it was in the other World: A Change that very few

few of us are willing to make, ſo long as we can conveniently reſide in this.

GIVE me leave here to argue this Point a little more cloſely, in order to remove theſe vulgar Prejudices, that too much prevail in the World. In the Spleen, Vapours, and Hypochondriack Melancholy, the Patient often perceives a Faintneſs to ſeize his Spirits, which is ſucceeded with Motes flying in the Air backward and forward before his Eyes, ſometimes as if Clouds and Miſts were floating in the Atmoſphere: Now that theſe Objects are not there as the Patient perceives them, I grant; and the Patient himſelf is very well appriz'd of the ſame; but then, How comes his Organs of Sight to miſrepreſent Objects, or bring Objects into View, that have no real Foundation in Nature? I do not mean, Does he imagine he ſees what is not, but is the Cauſe of that imaginary Viſion, a mere Creature of the Fancy, or does it ariſe from the Imparation of the Optick Inſtruments? From the latter certainly.

THESE

THESE Motes are nothing leſs than Corpuſcles of the Fluids attracting each other; which, as they paſs before the Retina, darken the Atmoſphere in certain Points, which Points appear to the Patient, as if they were real Motes. The Cauſe of theſe Phænomena ariſes from the Cryſtaline Humour being too groſly ſecreted, which demands the immediate Application of ſome proper Remedy that may divide, attenuate, and reſolve the Obſtructions of thoſe Fibres that ſecrete this Humour.

TAKE it in the other Senſe moſt liable to be affected under the Vapours: What is it that creates that tingling Noiſe in the Ears, that hiſſing Sound, that frequently affect vapouriſh People; is this alſo mere Whim? He hears this ringing Noiſe, it diſturbs his Reſt, and awakens him from his Slumbers, which certainly is more than nothing.

I AM not at all ſurpriz'd at the frequent Complaints we hear abroad, of ſo many People's loſing their Sight and Hearing;

PART II. Hearing; when Gentlemen are ſo ready to reſolve the Defects of thoſe noble Organs into Whim and Fancy, by which Means, their Diſorders are ſuffer'd to gain Ground, and affect the Patient with an irrecoverable Blindneſs and Deafneſs.

BUT, further, are the Pains that affect his Limbs, that affect his Back and Sides, all imaginary Whims? and, to come cloſer to the Matter, are thoſe Indigeſtions, thoſe ſevere, racking, Cholick Pains, thoſe purulent ſlimy Stools to undergo the ſame Fate? If this be the Way of reſolving Diſeaſes, whoſe Cauſes we may not, perhaps, be very well appriz'd of, I am afraid, in Time, we ſhall come to account the moſt dangerous Diſeaſes imaginary, and then if the Patient ſhould fall a Sacrifice thro' our Ignorance, who may he thank for his Fate?

The Perception of Health is inſeparably connected with its Exiſtence.

FROM the foregoing Arguments and Reaſonings upon this Subject, it clearly appears, that to be in Health, and perceive it, is the ſame Thing; and that it

is

is impoſſible that any Man can be in Health and not perceive it, and that there is a neceſſary inſeparable Connexion between the Exiſtence of Health, and the Perception of that Exiſtence: From which, whoever deviates, has a Demonſtration as evident as the Nature of the Thing will admit, that his Conſtitution is ſtarting from its natural Standard. CHAP. 2.

INDEED, I ſhall not deny, as I have already obſerv'd, but that the Mind may be miſtaken in judging of the Degrees, as well as Danger of a Diſeaſe; but ſtill the Cauſe of that wrong Judgment muſt ariſe from ſome Diſaffection in the Glands of the Brain, the immediate Inſtrument of regular Thinking; ſtill there muſt be ſome real Diſorder in the bodily Organs, ſome real Foundation for Complaint; ſtill the Springs, Wheels, and Pullies of the Conſtitution muſt, by ſome Means or other, be diſconcerted, or elſe the Mind can never receive the Impreſſion of a Diſeaſe.

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THE Fancy, we know by Experience, is a roving Faculty, and not eaſily confin'd to proper Bounds; but yet while her Organs are in Order, can ſee thro' all theſe Miſts that, ſometimes, under a Fit of the Spleen, cloud her Actions, and would perſuade us, that theſe Bodies of ours are chang'd into Tea Pots, Glaſſes, Gooſe Pyes, and the like odd and ridiculous Transformations: Theſe wrong Turns of the Fancy, all ariſe from Affections of the Body, which depend on the irregular Motions of the Nerves, that make unſuitable Impreſſions on the Imagination.

WHILE the Nerves, therefore, are in good Plight, the Ideas they convey through any of the Senſes will be regular, juſt, and clear; upon which the Underſtanding will judge and determine of Objects, as they are, by the Laws of Nature, made to exiſt to a Mind fitly diſpos'd, with proper Organs to receive their Impreſſion: But if the Structure or Mechaniſm of theſe Organs happen to be diſorder'd, and the Springs of the Machine

Machine out of Tune; no Wonder the Mind perceives the Alteration, and is affected with the Change. 

Now the Spleen is a Diſeaſe that puts a Blind on the Faculties of Mankind, whereby Perſons ſo affected, think, ſpeak, and act, ſometimes little different from thoſe under a Phrenſie. How often may we ſee the greateſt Philoſopher ſuffering under the Weight of this Diſorder, and, in vain, labouring with all his Might to get rid of its Tyranny. It is not long ago ſince a very learned and ingenious Gentleman, ſo far ſtarted from his Reaſon, as to believe, that his Body was metamorphos'd into a Hobby-Horſe, and nothing would ſerve his Turn, but that his Friend, who came to ſee him, muſt mount his Back and ride. I muſt confeſs, that all the Philoſophy I was Maſter of, could not diſpoſſeſs him of this Conceit; 'till, by the Application of generous Medicines, I reſtor'd the diſconcerted Nerves to their regular Motions, and, by that Means, gave him a Sight of his Error.

CHAP.

## CHAP. III.

### *Of the different Species of* Splenetick DISEASES.

IN treating of the Cauſes, that diverſify the Spleen, Vapours, and Hypochondriack Melancholy, I ſhall firſt conſider how far theſe Affections differ among themſelves; after that, I ſhall proceed to diſcover the Material Differences between them, and thoſe Diſeaſes, that, by a Parity of Symptoms, they ſeem moſt nearly related to, as the propereſt Way to diſcover as much of their abſtruſe Nature as is within the Reach of our Capacity to comprehend.

IN the foregoing Chapter, I have endeavoured to prove, that the Spleen, Vapours, *&c.* are real Diſeaſes, and no Ways depending on the imaginary Whims of Fancy. Now, if they be real Diſeaſes they muſt have Symptoms, whereby

whereby the Mind may perceive them whenever they appear; for it is impoſſible, that the Wit of Man can conceive any Idea of a Diſeaſe, without Symptoms, or that Symptoms can ſupport themſelves in the Conſtitution without a Cauſe, or that any Cauſe can diſorder the Frame of the Animal OEconomy without being perceived by the Mind; for where there is no Perception of a Change in the Mind, there can be no Senſation of a Change in the Animal Organs, and conſequently no Diſeaſe in the Body. I except here to theſe Diſeaſes that deprive the Mind of all Perception of Objects, as frequently happens in the Apoplexy, Epilepſy, and Sincope. 

IN moſt Diſeaſes there is a natural Temperature, that indicates the Conſtitution more naturally inclined to one Diſeaſe than another; but the Spleen ſeems, almoſt, an Exception to this general Rule; becauſe we perceive ſeveral People affected with the Spleen, not any ways naturally diſpos'd to it.

THESE Perſons, that are, by the Order of Nature, diſpos'd to be affected with the Spleen, Vapours, and Hypochondriack Melancholy, are generally obſerv'd of a meagre, hirſute Habit of Body, of a dark, pale, and wan Complexion, whoſe Nerves are finely ſtrung, in the ſeveral Organs, they compoſe, which give a moſt exquiſite Senſation to the Parts; and hence it happens, that Perſons of this Complexion are ſo ſenſibly affected with every the leaſt Recedence of the Nerves from their natural Standard.

The Reaſon why the Perception of Danger is greatly encreas'd in the Spleen, above what it is under a Conſumption, though more real Danger attends the latter.

AND here a Queſtion very naturally ariſes, and that is, why Perſons in a Fit of the Vapours think themſelves every Moment a dying, and paſt all Hopes of Recovery, when very little Danger attends their Caſe; while a conſumptive Patient will ſcarce believe the leaſt Danger, but flatters himſelf with Hopes, againſt all Poſſibility of Hope, and when not the leaſt Symptom of his Recovery appears.

TO anſwer this Point in the cleareſt Manner, we are to conſider, that in the Spleen and Vapours, the Nerves and Fibres relax moſt in thoſe Parts, that have the neareſt Commerce with our Thoughts; that is, thoſe Nerves ſtart firſt from their Standard, that immediately ſupport the Mind in its Operation of Thinking; and as they are the Inſtruments of Senſation, it's impoſſible they can ſuffer the leaſt Affection, without, at the ſame Time, making the Mind ſenſible of the Change; ſo that upon the Sinking of the Nerves, the Spirits themſelves muſt neceſſarily ſink, which will give a Sinking or Sadneſs to the Mind: This is what we mean by thoſe Lowneſſes of the Spirits, thoſe Fears and Dejections of the Mind, that generally affect us with thoſe uneaſy Senſations under a Fit of the Spleen.

ON the contrary, a Conſumption, being a Decay of the muſcular fleſhy Fibres, lays not that Load or Sadneſs on the Spirits, that muſt neceſſarily enſue, where the Nerves are the principal Inſtruments

affected. Beſides, in Conſumptions, whether of the Phthiſical or Atrophical Kind, the muſcular fleſhy Parts do ſo gradually melt down, and are ſtruck off from the Conſtitution, in ſuch minute Proportions, that they ſcarce give the Mind any Intelligence of their Departure; which is the grand Reaſon why the Patient will ſcarce ever believe his Caſe ſo dangerous as it really appears to a judicious Enquirer.

Of the Difference between the Spleen, Vapours, and Hypochondriack Melancholy.

FROM the beſt and niceſt Obſervations I have been able to make, I cannot diſcover any other Difference between the Spleen and Hypochondriack Melancholy, than that the Hip. is the Spleen improv'd on the Conſtitution, through a longer Continuance of the Diſeaſe: The Vapours are ſo nearly related to the Spleen, that whatever can, with any Propriety, be alledg'd of the one; with a very little Variation, may be inferr'd of the other. Both Men and Women, ſubject to the foregoing Diſorders, are liable to be affected with a Lowneſs of Spirits; both are ſubject to generate Wind, to a coſtive Body; both

alſo

alſo are incident to be affected with a ſudden Failure of the Senſes, a caſual Abſence of Reaſon; whereby the regular State of the Animal OEconomy is ſometimes greatly interrupted: So that theſe Diſorders receive their different Natures from their affecting different Sexes; for what the Vapours are in Women, that the Spleen is in Men, and if the Vapours are ſubject to Hiſterick Fits, the Spleen is ſometimes incident to be affected with the Epilepſy, or at leaſt Diſorders of the Convulſive Kind, which is the Reaſon why I treat of them in ſeparate Chapters.

The Scurvy inſeparably connected with the Spleen.

THOSE that are ſubject to the Hip. ſeldom are free from the Scurvy at the ſame Time; nor is it poſſible they ever can be ſeparated, unleſs the Diſeaſe takes its Riſe from ſome great Paſſion of Grief, that depreſſes the Action of the Mind; and, even then, if it continues for any conſiderable Time, will not fail to contaminate the Motions of the Blood and other Juices.

THIS is the Reaſon, why the Blood, in all Splenetick Caſes, is thick, heavy, and what we call Melancholy Blood; for upon a Relaxation of the Arteries, the Blood will remit of its Motions: Upon theſe Remiſſions its Particles will attract each other, and form larger Globules than can well paſs the minute arterial Fibres, upon which there will be a Defect in the Secretions of the Animal Fluids, that will conſequently impair the Action of the Nerves; which is the Reaſon why, in ſome Caſes of the Spleen, the Impulſe of the Nerves is made ſo faintly on the Seat of the common Senſorium, as ſcarce to awaken the Soul into a Senſibility of its Being. And hence ariſe that ſudden Lapſe of the Senſes, thoſe Failures of the Spirits, and that caſual Abſence of Reaſon, that often affect the Patient under any great or ſurprizing unexpected Turn of Affairs.

The Spleen and Vapours the Grounds of all nervoſe Diſeaſes, as the Scurvy is the Ground of all Chronick Diſeaſes.

THE Spleen and Vapours I look upon to have the ſame relation to nervoſe Diſeaſes, that the Scurvy bears to thoſe of a Chronick Nature; that is to ſay, they

they are the Grounds on which both theſe different Claſſes of Diſeaſes are ſupported; for as it is impoſſible to conceive how any Chronick Diſeaſe can affect the Body without having the Scurvy for its Parent, ſo is it equally impoſſible to diſcover how any nervoſe Affection can invade the Conſtitution, without deriving its Origin from this of the Spleen.

IT frequently happens, if great Care be not timely taken, that the Spleen and Vapours make a Tranſition into Madneſs, by which Word I comprehend all the ſeveral Species of Diſtraction; if the Conſtitution be bilioſe, there follows a Mania, which is a moſt raging involuntary Fury, attended with all the Symptoms, that are fearleſs, bold, and daring: If Phlegmatick, a ſettled, fix'd, moaping Melancholy, wherein the Patient revolves in his Mind all the deſpairing Ideas, he poſſibly can crowd upon his Thoughts: And hence it clearly appears, that the different Motions of the Madneſs depends on the Difference of the Conſtitution, prior to the Invaſion of the Diſeaſe.

THIS is that different State of the Body and Mind under theſe different Affections; both of which have their Periods of Exaſperations and Remiſſions, according as the Patient is more or leſs indulging in the Uſe of the Non-naturals, but eſpecially his Diet; and as he is liable to be affected with the different Temperatures of the Seaſons, which are known to have a great Influence over all Kinds of Diſtraction. And this is the Reaſon why the Fit of Madneſs is moſt exaſperated at the Spring and Fall, as alſo at the Full and Wane of the Moon; becauſe at theſe Periods the Motion of the Brain ſwells or ſubſides more, than at any other Times, from the greater or leſſer Preſſure of the Atmoſphere, which is the Reaſon why theſe Diſorders either riſe to an outrageous Degree, or ſink into a deep Dotage or natural Melancholy.

TO conclude; from the foregoing Reaſonings it clearly appears, that theſe ſeveral Species of Melancholy Diſorders, are only the ſame Diſeaſe improv'd in different

different Conſtitutions, or in the different Habits of different Sexes, which excite different Symptoms, according to the different Motions of the Animal Fibres, as will more clearly appear from the following Diſcourſes on thoſe Subjects. CHAP. 3.

## CHAP. IV.

### *Of the Symptoms of the* SPLEEN *in Men.*

IF then theſe Affections, call'd Spleen and Vapours, be real Diſeaſes, as appears from the Reaſonings and Arguments I have already advanced in Support of their Exiſtence, they muſt have certain Marks and Characters, by which we may diſtinguiſh them from a healthful Temperature; and certain * Pathogonomicks or inſeparable Characters, by which we may diſcover their ſpecifick Nature, and diſtinguiſh CHAP. 4.

* Inſeparable Symptoms that always appear when the Diſeaſe is legitimate.

PART II. diſtinguiſh them from all others, that come under the ſame Claſs.

THESE are the eſſential Attributes or Habitudes, that neceſſarily conſtitute every Diſeaſe. The Symptoms give us the Idea of a Change in the Conſtitution, the Pathogonomicks indicate the inſeparable Symptoms, that diſtinguiſh that Change; ſo that here we have certain Marks both to diſcover the Diſeaſe, and ſpecify its peculiar Nature; for while the Nerves ſerving the ſeveral Senſes, and the Uſe of the Brain, that ſupports the common Senſorium, continue their proper Action, the Impreſſion of Objects will be regular, and the Mind perceive every thing to be what it is; therefore it follows, that whenever the Mind begins to entertain Ideas different, from what they are in Nature, or what Nature is made to repreſent them to a well-diſpos'd Syſtem of Organs, that is a Demonſtration as clear as can be given, that the Nerves are ſtarting from their natural Standard.

Of the firſt Symptoms of the Spleen.

PERSONS, therefore, when they firſt perceive themſelves ſeiz'd with the Spleen, com-

complain of a manifeſt Change in the Conſtitution, a Decline from a better to a worſe State of Health; and whereas before their Spirits were gay, merry, and chearful, they, at certain Intervals, perceive them to flag, and the Conſtitution of Mind to be dull, heavy, and uneaſy. This firſt Scene of the Spleen is uſher'd in with a gaping and ſtretching of the Muſcles of the Jaws at certain Intervals; the Patient yawns ſeveral Times, ſtretches out his Arms, and heaves up his Breaſt, as if tir'd, or as they generally do that have laid too long in Bed; and becauſe theſe firſt Symptoms are rather attended with Uneaſineſs than Pain, and give little Diſturbance to the Patient, he paſſes them over with very little Attention.

UNDER theſe Symptoms the Complexion is wan, pale, and a little declining from its uſual Vivacity; the Eyes appear dull, and of a faded Aſpect, not unlike thoſe that are affected with the firſt Beginnings of a Decay or Conſumption. If the Stomach at all ſuffer under the firſt Beginnings of the Spleen, (for I have known ſeveral Caſes where the Stomach

PART II.

Stomach has not been in the leaſt affected) then the Appetite is faint, which comes and goes by Fits, and is very precarious. Under theſe Circumſtances, unleſs you preſently get ready what they have an Inclination to eat, the Appetite immediately vaniſhes, after which they cannot endure the Sight of Victuals: To theſe Symptoms ſucceed a Lowneſs of Spirits, accompany'd with a Faintneſs and Dizzineſs of the Head, which is the Reaſon, why they ſo often take to Drinking of Drams, or hot fiery Spirits, that, inſtead of relieving theſe Symptoms, only haſten on the Diſeaſe, and facilitate their Ruin.

Of the Progreſs of the Symptoms.

FROM the Leavings of the Chile through Indigeſtion, or a Slowneſs of this Bowel to perform its Office, ariſe theſe Crudities, that being chang'd into Wind, furniſh out the greateſt Part of Splenetick Symptoms. If this Wind finds a Vent by the ſuperior Orifice of the Stomach, it ariſes in frequent Rifts, Belchings, and Hiccoughs, that are hot, ſharp, and ſour to that Degree, as ſometimes to ſet the Teeth an Edge; but if

theſe

these Fumes are unable to force a Vent this Way, then the Wind descends into the Bowels, which passing along that winding Pipe, we call the Intestines, excites a new Scene of Symptoms. Hence arise all these strange Murmurings in the Bowels, these Rumbling, Grumbling, Croaking, Catterwauling Conflicts, so unusual sometimes, that you would be apt to believe, that Cats are wawling in the Belly. CHAP. 4.

WHEN the foregoing Causes, by the Pressure of the neighbouring Parts, are forc'd into the Fibres of the Muscles, the Progress of the Disease is attended with the following additional Symptoms: His Limbs are weak, his Legs tremble, which, upon walking, seem scarce able to support his tottering Carcase; wandering Pains affect his Back, Loins, and Ankles; sometimes they run into his Arms and Wrists, and mimick Pains not unlike those that accompany the Rheumatism; sometimes the Patient perceives cold, chilly Shiverings to run down his Back Bone, in the same Manner as in the Beginning of an intermitting Fever. The

Hypo-

PART II. Hypochonders on the right and left Side, are ſubject to be affected with frequent Swellings and Inflammations, greatly diſturbing to thoſe Parts.

The Body is very unequal in Relation to its natural Diſcharges; for ſometimes it is obſtinately coſtive, at other times it is obſtinately looſe; both States are attended with ſlimy Stools. Under theſe Circumſtances, great Profuſions of pale, crude, and watry Urine are diſcharg'd, that greatly depreſs the Motions of the Spirits, and damp the Action of the Animal Faculties.

WHEN the Spleen is ſuffer'd to make this Ravage in the Conſtitution, it begins to attack the Head, Brain, and Nerves: The Temples more eſpecially are affected with ſharp, acute Pains; ſome are troubled with a Beating or Thumping in the Inſide of the Skull, which, to them, ſeems as if a Hammer was ſtruck againſt an Anvil; ſometimes this Pulſation is felt on the fore, ſometimes on the hind Part of the Head.

CHAP. 4.

FREQUENTLY in the Day Time dark Miſts fall before the Eyes, and the Atmoſphere appears crouded with Motes waving back and forwards, and not ſeldom his Sight is wholly interrupted; nor are the Organs of Viſion only thus affected, but thoſe of Hearing often undergo the ſame Fate, and are ſubject to a hiſſing, ſinging Noiſe, very troubleſome to bear: This Diſorder of the Hearing proceeds from Cold already taken, that falling upon the Organ of the Ear, ſo relaxes the Drum and Auditory Nerve, that the leaſt Diverſity of Weather ſhall ever after affect it with diſagreeable Sounds; and this in Fact we obſerve, that vapouriſh People are more liable to ſuffer from this tingling Noiſe, when the Atmoſphere is moiſt, hazy, and greatly overcaſt, than at any other Time; becauſe then the Weather is apteſt to relax the Fibres of the Auditory Nerve to a higher Degree, and conſequently infer thoſe Changes in the Organs, that furniſh us with the Idea of thoſe diſagreeable Sounds.

WHEN this Diſeaſe has been of any conſiderable ſtanding, a Vertigo, Dizzineſs, and Faintneſs, are inſeparable Symptoms, and the Patient, upon the ſlighteſt Motion, is apt to break out in moiſt, cold, clammy Sweats, moſt conſpicuous about the Temples, and Parts of the Forehead: He ſtarts in his Sleep, and often awakes from his Slumbers, terribly affrighted with the Horrors of his Dreams.

ALL ſudden Surprizes greatly affect them; and as ſome have dy'd of ſudden, exceſſive Grief, ſo others have ſuffer'd the ſame Change, under the Preſſure of ſudden, exceſſive Joy; the Conſtitution, under theſe Diſorders, not being able to bear, through an exceeding Tenderneſs of the nervous Syſtem, the Extreams of either Grief or Joy, without a very great Shock and Emotion of the Spirits.

THUS far of the Symptoms that affect Splenetick People in relation to the Habit. I ſhall now proceed to diſcourſe of thoſe, that ariſe from the variable Temper of

of the Mind; not, to ſpeak properly, that the Mind ever varies, but only appears ſo to do, from the variable Temperature and Motion of the Organs. CHAP. 4.

Of the Symptoms of the Mind.

SPLENETICK People are obſerv'd to be naturally quick of Apprehenſion, vivacious, and of a Mind finely turn'd to contemplate their Ideas; they are often forgetful, which does not proceed ſo much from a natural Defect of the Memory, as an Imparation of the Fibres, on whoſe Rectitude this Faculty immediately depends: They are ſubject to very impertinent and groundleſs Fears, that render Life not only uneaſy to themſelves, but greatly perplexing to all their Friends about them. Sometimes they fancy they are juſt going to die, and call for their Relations and Neighbours, in as formal a Manner, as if they were immediately about to expire.

AND under leſſer Diſturbances of the Imagination, they are continually complaining of their unhappy State of Life, oppreſs'd and overborn with Calamities and Afflictions; no Bodies Pains are

PART II. equal to their Pains; none knows what they feel and ſuffer: Nor are they leſs ſteady in their Tempers; ſometimes they are chearful, gay, and agreeably diverting; by and by the ſullen Fit comes on, and they are depreſs'd to the laſt Degree of Deſpair; now again, a Glaſs of generous Wine ſhall raiſe them to the higheſt Pitch of Life and Vigour; the next Day they are dying, and demand of their Friends to prepare for their Funeral; and, indeed, to recount all the ſilly, odd, and ridiculous Fancies, that have occurr'd to the Minds of theſe fantaſtick People, would ſwell this little Tract to a large Volume.

THUS, in this diſconſolate State, are they a Plague to themſelves, their Friends, and all that have any Concern with them; and tho' their Circumſtances are in the moſt flouriſhing Condition, their Tables ſpread with all the moſt delicate Dainties, that Art and Nature can provide; yet that great Bleſſing Content is abſent from their Dwellings; ſo that they eat their Bread with greater Carefulneſs and Anxiety, than thoſe that beg it from Door to Door; ſo far has it pleaſed

pleaſed the divine Providence to level the greateſt Lord upon a Square with the meaneſt Beggar. CHAP. 4.

## CHAP. V.

### *Of the Symptoms of* VAPOURS *and* HYSTERICK FITS *in Women.*

THE Symptoms that affect Women in the Beginning of the Vapours, are ſo nearly related to thoſe that diſorder the Imagination of Men under a Fit of the Spleen, that I ſhould not have treated them in ſeparate Chapters, were it not that the Vapours are incident to convulſive Motions of the whole nervoſe Syſtem, whereby, that oppreſſive Matter, crouded on the Organs of the Brain, Lungs, and inferior Bowels, is caſt off in frequent Paroxyſms. CHAP. 5.

I SHALL, therefore, in a more particular Manner, confine my Obſervations to the Symptoms incident to diſconcert the Animal Springs of the Fair Sex, un-

PART II. der this Diſeaſe, becauſe thoſe Fits, vulgarly call'd the Hyſterick Diſeaſe, are more frequently obſerv'd to affect their Habit, either from a ſtronger Impulſe of their Paſſions, or a finer Texture of their Nerves; tho' I deny not but that, Men under a Fit of the Spleen, are liable to be affected with Symptoms of a convulſive Nature.

Of the Symptoms of the Vapours, before the Invaſion of the Hyſterick Fits.

THERE is a conſiderable Scene acted, as well in the ſeveral Organs of the Body, as Faculties of the Mind, before theſe Fits of Vapours appear. The Female Patient firſt perceives herſelf low-ſpirited, is ſubject to a Giddineſs or Vertigo, a Lightneſs or Swiming in the Head, attended with Faintings, and a Weakneſs of all the Senſes.

UPON any ſudden Surprize, the Patient is ſubject to frequent Sighings, Tremblings, and Palpitations of the Heart; convulſive Twitchings of the Muſcles, Tendons, and Nerves, in the Face, Back, and Loins; a troubleſome moleſting Noiſe and Rumbling in the inferior Bowels, which often ends in belching Eructations,

and

and the Riſing of much Wind from the Stomach. CHAP. 5.

THE Appetite riſes and falls ſtrangely; ſometimes the Patient is ready to faint away, unleſs ſhe be immediately ſupported with Suſtenance; at other Times her Stomach is ſo full, from a Diſtention of the * Hypochonders with Wind, that ſhe cannot eat the leaſt Morſel of Victuals: Nor does the Unhappineſs of theſe miſerable Mortals conſiſt only in this Decay of their bodily Organs, but the ſame gloomy Symptoms moſt ſadly affect their Minds, and chain them down to the moſt diſmal Way of Thinking, that they poſſibly can conceive.

* Are the right and left Parts of the lower Belly, where lie the Liver and Spleen.

FEAR, Sadneſs, and Deſpair, thoſe cruel Torturers of the Soul, ſo abſolutely poſſeſs their Minds, that it's impoſſible to affect them with the leaſt poſſible Hopes of Recovery; they fancy themſelves obnoxious to all the Ills and Unhappineſſes, that human Nature can be affected with, and give themſelves up a Prey to the moſt inſulting Paſſions of Anger, Jealouſy, Suſpicion, and whatever

PART II. elſe can diſturb the Tranquillity of their Peace. Their Breaſts are Strangers, and even Enemies to Joy, Hope, and Gladneſs; theſe chearful exhilerating Paſſions ſeldom find Admiſſion within the Compaſs of their diſturbed Minds.

AND as they are thus wavering and unſteady in their Judgments, neither do they obſerve a Rectitude in any one Action of Life: Now they love a Perſon to Exceſs, preſently after they hate him in the other Extreme; anon they reſolve to do ſuch an Action, a Moment after they alter their Purpoſe, and take directly contrary Meaſures; ſo that thro' the whole Scene of their Lives, you ſhall obſerve them conſtant to nothing but Inconſtancy; always wavering, unſteady, and fearful of doing wrong, in the moſt trifling Concerns of Life; yet in all other Reſpects, as ingenious, well-diſpos'd People, as you would deſire to converſe with.

THUS far as to the Symptoms preceding the Invaſion of the Hyſterick Paroxyſm, improperly call'd Fits of the Mother,

Mother, or Womb; the Antients erroneouſly ſuppoſing, that they aroſe from a bad Ferment or Collection of ſharp Humours lodg'd upon thoſe Parts; which Opinion ſhall be conſider'd in its proper Place. 

BUT if, through Negligence of the Patient, the foregoing Symptoms are ſuffer'd to continue, and harraſs the Conſtitution, for any conſiderable Time, they then produce a new Train of Symptoms, greatly different from the former, both in Relation to their Nature and Cauſes; for both the Spleen and Vapours ariſe, in their firſt Beginnings, from a Relaxation of the fine Fibres of the Brain and Nerves, whereby thoſe Inſtruments of Thought and Senſation, are let down beneath their natural Standard, from whence all the Symptoms are dejecting. Now the Hyſterick Paroxyſm is excited through a mechanical Neceſſity in the Solids to diſcharge the nervoſe Syſtem of thoſe diſagreeable Corpuſcles, that are the immediate Grounds of the foregoing Symptoms; and as this mechanical Neceſſity ariſes from the Motions of the Nerves, exerted

Of the Invaſion of the Hyſterick Paroxyſms.

PART II. exerted at these Times to restore their contractile Powers, so will it follow, that these Fits, or at least the Symptoms attending these Fits, will be different, according to the different Temperature of the Body, the Causes producing these Symptoms, and the different Passions to which the Patient was subject, before the Invasion of the Disease; and these several Circumstances will be over and above sufficient to excite the Symptoms in one Person, widely different from what they are in others.

I SHALL, therefore, first Attempt to explain the Nature of these Hysterick Symptoms or Characters that form the Fits; afterwards I shall proceed to assign their Causes; and, in Conclusion, shall endeavour to demonstrate the Grounds, on which we have establish'd these Causes; and the Reasons that induced me rather to solve these Phænomena upon the Principles of mechanical Reasonings, than any others; for it is impossible to discover the Causes, before we get a right Knowledge of the Symptoms, because it is a Collection of the Symptoms,

united under one common Appearance, that forms the Diſeaſe, and makes it what it is. The Cauſes ſupport the Symptoms, not the Symptoms the Cauſes: Theſe two Principles, being Cauſe and Effect, do always exiſt inſeparable in Nature; for where-ever there is a Diſeaſe, there will be a Cauſe, and conſequently Symptoms; all which will appear in their proper Natures; for the Cauſes and Effects of Diſeaſes ariſing only from the irregular Motions of the Solids and Fluids, can have no Diſguiſes, but are conſtantly what they appear to be; the Cauſes real Cauſes, and the Effects real Effects reſulting from thoſe Cauſes. CHAP. 5.

Of the ſtill Fits.

WE, therefore, frequently obſerve, that the Acceſs of the Fits, upon the Invaſion of the Hyſterick Paroxyſm, differs very much in different Conſtitutions: Some faint away in the firſt Onſet, and are affected with a Sincope or Swooning, in which the Action of all the Animal Faculties is highly perverted and diſtreſs'd. They involuntarily graſp their Hands, fix their Teeth, and ſtretch out their

PART II. their Limbs, as in Convulsions, but lie still: By-and-by the Patient gives Signs of Recovery, and is almost choak'd with Rifts of Wind, that they discharge in Belchings. They now weep, then laugh, and sigh, and sob, and cry by Turns, till in a Moment of Time they again faint away as in the Beginning. The Hands and Legs are both strongly convuls'd, tho' the Trunk has but little Motion. These Fits they repeat sometimes four or five Times with very little Intermission, no sooner out of one, but into another; at last they gradually revive, and if, as they return to their Senses, they fetch a deep Groan, it is a certain Indication that the Fits are going off.

THESE Fits generally proceed from great Grief, Disappointments, unsuccessful Attempts in Love, or some other huge Passion, that was too mighty for the weakly Mortal to encounter; they are the most dangerous Kind of Fits, as well in relation to their Consequences, as Difficulty of Cure; for they argue a Defect of Motion in the Blood of some principal Organ, and that the Fits are unable

unable to discharge the Causes, or at least but partially. 

In some Cases all the Sensations are encreas'd to a Degree almost above the Bearance of human Nature. A fix'd, intolerable Head-ach, is the first Symptom that seizes the Patient: In some the Pain is drawn to a Point, but so excessively racking, that an Awl or sharp Instrument struck into the Skull, could not create greater Torture. The same excruciating Pains often dart from the Head into the Back, Stomach, and Bowels, and there excite the Hysterick Cholick, which is attended with frequent Reachings and Vomitings of a green poracious Bile; by-and-by they shoot into the Nerves, Tendons, and finer Membranes of the Muscles, and there excite the Hysterick Rheumatism; and after it has continu'd to afflict the Patient several Days, Weeks, or sometimes Months, with Pains capable of depressing the most resolute Courage, it often terminates in the Jaundice; upon which the Patient evidently perceives himself to grow better; for tho' the Jaundice is a very dangerous Disease, yet it's

Of the painful Fits.

it's a good Preſage, when it comes upon one ſo much worſe, and attended with Conſequences much more fatal to the Conſtitution.

Of the Fits attended with convulſive Motions.

IN others, again, the whole Body is moſt cruelly affected with convulſive Motions. In theſe Fits they immediately fall to the Earth, or are flung with great Violence, as in the Epilepſy: They ſometimes loſe the Uſe of all their Senſes; the Exerciſe of Reaſon, Reflection, and Memory, are at once diſconcerted: The Eyes are either immovably fix'd, or ſwim and roll in a frightful Manner; by-and-by the Head itſelf is variouſly agitated and ſhaken with divers Motions; the Lips tremble, the Noſe is contracted, and the Teeth chatter in the Jaws: Some People continually cough and bark in the Fit: In others the Windpipe is ſo convuls'd from the aſcending Spaſms affecting the Thorax, and reſpiratory Organs, that the Patient is in the higheſt Danger of Suffocation, as appears from the Blackneſs of the Face in the ſevereſt Fits. A little after the Stomach and Bowels work and heave to and fro in a very unnatural Manner;

Manner, the Hands clinch, and the Legs and Arms are affected with divers Bendings and irregular Motions. CHAP. 5.

SOMETIMES the Order of this Deſcent of the Symptoms is inverted, and, inſtead of deſcending, they ariſe; the reſpiratory Organs ſubſiding, in ſome meaſure, while the Abdomen and Parts adjacent are ſwell'd to an immenſe Degree. When the Fits ariſe to this ſevereſt Height, the whole nervoſe Syſtem is hugely convuls'd, and the Patient acquires a Strength greatly ſuperior to the ſtrongeſt Man, though, not præternaturally aſſiſted, might eaſily be lifted by an ordinary Perſon. Divers Parts of the Body, but eſpecially the Trunk, heave and work as if the Will concurr'd to the Action. In ſome, the Wind ruſhing through the Inteſtines ſo convulſes the inner Coats, that, from a mechanical Modulation of their Fibres, there ariſes a Noiſe or Murmuring, not unlike articulate Sounds, which has greatly impos'd upon ignorant, ſuperſtitious People, as if the Patient was poſſeſs'd, or under the Influence of an Evil Tongue; though all

all these surprizing Symptoms are accountable from Causes merely natural, as shall more clearly appear in the following Chapters.

AND I am persuaded, that these Agitations, Vagaries, and pretended Inspirations of our late, modern, French Prophets, that so surprizingly affected the vulgar Spectators, were nothing more than Convulsions in the Men, and a lesser Degree of Hysterick Fits in their Women; for, to my certain Knowledge, a young Woman, by following these People had got such a Habit, that, by summoning her Passions, she would fling herself into these Agitations at Pleasure; but though she could begin these Fits upon the least Warning, yet she could not stop them when she pleas'd, but once begun, they would continue their Spasms and convulsive Motions for a certain Space of Time, 'till the mechanical Necessity ceas'd.

A most remarkable History of Hysterick Fits.

THE following Relation is the Case of a young Lady I visited, attended with the most surprizing Symptoms of

Vapours

Vapours and Hyſterick Fits I ever be- CHAP. 5.
held in my Life. She was of a thin, pale Complexion, of a tall, ſlender Habit; and ſubject to a ſharp, acute Pain of her Head, that was greatly exaſperated at certain Seaſons.

UPON the Acceſs of the Fit, ſhe fell violently on the Floor, and all her Body was agitated, ſhaken, and diſtorted in a moſt cruel Manner. Her Head was violently convuls'd divers Ways, her Eyes were contracted inwardly in their Orbits, with their Whites turn'd up and fix'd. To theſe Symptoms follow'd a light, murmuring Noiſe in the Bowels, which was ſucceeded with a great Diſtention of the left Hypochonder, that terminated in a round Globe, ſwell'd prodigiouſly above the Surface of her Belly; preſently after ſhe ſmil'd, and mimick'd a laughing Countenance, then cry'd, ſigh'd, and groan'd, after which ſhe lay ſtill. In about five Minutes Time, the Convulſions return'd in the moſt furious Manner; upon which, to my great Surprize, ſhe was ſuddenly flung off the Bed, with a prodigious Impulſe; the whole

whole Body being darted, as it were, from a Spring, her Abdomen gave the greateſt Signs of the impulſive Motion; immediately after this I obſerv'd the round Globe that form'd the Swelling on the left Hypochonder vaniſh'd, though the Convulſions continued, and notwithſtanding there were half a Dozen in the Room, yet much ado had they all to lift her on the Bed again, ſo ſtrong was the Fit, above all the natural Powers of her Body.

ALL her Limbs, Hands, Head, and Feet were agitated with divers Bendings, Motions, and Contractions; all the immoveable Muſcles of her Body ſtretch'd as on a Rack, and the Spume or Foam that work'd from her Mouth was mix'd with Streaks of Blood. At length the Rigour of the Fits abated, or at leaſt ſeem'd to abate, and ſhe lay ſtill, which was follow'd with an unuſual murmuring Noiſe from within, that greatly ſurpriz'd the By-ſtanders. Some ſuperſtitious People, there preſent, endeavour'd to impoſe a Senſe on theſe inarticulate Sounds; tho' I am ſure her Lips ne-

ver

ver moved : The Noiſe was not unlike the Crying of an Infant, which was frequent and ſudden. 

THUS ſhe lay for near three Hours, and then the muſcular Fibrillæ began to relax, and ſhe, by Degrees, to come to herſelf; but notwithſtanding it was high Noon-Day, and not above twelve of the Clock, yet could ſhe not diſcover the leaſt Glimmerings of Light for above five Hours, the Severity of her Fits had ſo weaken'd the Fibres of the Optick Nerves. She complain'd of a great Dizzineſs of her Head, a Numbneſs and Stiffneſs in all her Limbs, and her Bones were ſo exceedingly ſore, that ſhe ſcarce would believe, but that ſomebody had been drubbing her : As ſoon as ſhe was perfectly reſtor'd to the Uſe of her Senſes, ſhe declar'd that ſhe could not remember the leaſt Tranſaction, that happen'd during all this Uproar and Diſorder.

# CHAP. VI.

## *Of the Symptoms of the* HYPOCHONDRIACK MELANCHOLY.

THE Hypochondriack Melancholy is only the laſt or higheſt Degree of the Spleen or Vapours, wherein all the Symptoms are heighten'd to a ſurprizing Degree. Under theſe Circumſtances nothing but Horror reigns; the Ideas are dark, unſteady, and confus'd: Sometimes the Exerciſe of Reaſon it ſelf is interrupted, and the Mind harraſs'd with terrible Perturbations, Anxieties, and ſad Deſpair. When this Diſorder has been of any conſiderable ſtanding, the unhappy Patient begins to deſpair of a Cure, and revolves upon all the moſt gloomy Ideas, that he can poſſibly form to himſelf, in the whole Circle

of

of Nature, which almoſt reduce him to a State of Deſperation. CHAP. 6.

AND as the Hypochondriack Melancholy is only the Progreſs of the Spleen and Vapours, ſo melancholy Madneſs is only the Hyp. improv'd upon the Conſtitution from Length of Time, and a Continuance of the Diſeaſe; which is the Reaſon why, in the next Chapter, where I profeſſedly treat of this Subject, I only handle it as the Progreſs of the Symptoms, when they degenerate into melancholy Madneſs. So eaſie, indeed, is the Tranſition from the higheſt Degree of the Hyp. into the loweſt of a fix'd, ſettled, melancholy Madneſs, that it's impoſſible to mark out the Boundaries, or diſcover any Pathogonomicks, that may diſcriminate a Difference.

INDEED I may not deny, but that the Hypochondria, vulgarly call'd the Hyp. ſtrictly taken, according to the ancient Acceptation of that Word, is a Term, that only implies a Tumult or Diſorder in the lower Region of the Bowels, from a Faultineſs in the Organ of the

PART II. Spleen; the Ancients erroneouſly ſuppoſing, that this Organ was the primary Seat or Receptacle of the melancholy Humour, which, from the frequent Rifts of Wind, that affected People troubled with this Diſeaſe, they call'd the *Flatus Hypochondriacus*. But as it is impoſſible, that thoſe lower Regions can ſuffer in any conſiderable Degree, without, at the ſame Time, diſconcerting the noble Springs of the Animal Powers above; that is, the Brain and its Dependants, the Intellectual Faculties; ſo I ſhall comprehend, under the foregoing Term, all its ſeveral Degrees, that can poſſibly affect the Conſtitution under the moſt deſpairing Symptoms.

Of the Symptoms of Hypochondriack Melancholy.

IN the former Caſes of the Spleen, Vapours, and Hyſterick Fits, the Symptoms ſeem'd more particularly to oppreſs the Bodily Organs; but now they appear more immediately to affect the Mind, and diſconcert the Powers of the Intellectual Faculties: Not that the Body in reality is abſolutely free, but only that the Mind, under theſe horrible Ideas, that thus ſtrongly crowd upon the Fancy,

is leſs attentive to the Sufferings or Af- CHAP. 6.
fections of the Body, being wholly taken up with revolving upon whatever can crowd the Mind with the moſt dark, gloomy, and diſmal Apprehenſions.

IN the Night Time they are affrighten'd with many abſurd, fearful, and phantaſtick Viſions, that crowd about their Eyes, and diſturb their Slumbers: And, although they often are of a lean, ſwarthy, hirſute, unchearful Countenance, by Reaſon of the Fears, Griefs, and Anxieties they are agitated with; yet ſome of them have good Memories, happy Wits, and excellent Apprehenſions, during their lucid Intervals. Their Pulſe varies much, according to the Nature of the Cauſe that excites the Diſeaſe; ſometimes it is ſlow, ſometimes quick, but always unequal. Their Stools are generally hard, black, and but little in Quantity; their Urine, for the moſt part, pale, crude, watry, but varies its Colour and Conſiſtence, according to the Conſtitution of the Patient, the Degrees of the Diſeaſe, and the Advances it has made.

ANTIQUITY it ſelf, with all its Fruitfulneſs of Invention, ſcarce ever conceiv'd ſo many, odd, ridiculous and abſurd Changes, as Hypochondriack Perſons will fancy of themſelves, when once the Imagination is thoroughly vitiated, from an irregular Motion of the Fibres of the Brain: Some perſwade themſelves that their Bodies are transform'd into Swans, Geeſe, Glaſſes, Tea Cups, *&c.* and act with the very ſame Regard to their Friends and Acquaintance, as if their Bodies had actually ſuffer'd ſuch a Metamorphoſis. Some again certainly know, that they are a Dying, yea, ready to expire, and demand immediately to be laid out; others turn Prophets, and foretel the Deſtruction of Houſes, Families, Towns, Cities and Kingdoms, or their own Death, and, that they ſhall certainly expire at ſuch a Period of Life. In the mean time, what Emotions of Mind and Body enſue upon theſe Diſorders, is incredible to ſpeak; the former is often crowded with the darkeſt Scenes of Horror and Diſtruſt, with ſad and melancholy Reflections on their own diſmal and gloomy

State;

State; from which often they ſhut out all Hopes of Recovery, and fall into an incurable Deſpair; for, finding little Relief from the various Remedies they have taken, they reflect deeply on their preſent woeful Condition, and exaggerate to themſelves the miſerable Effects of their Diſtemper, never, never to be cur'd; and thus, by frequent, and almoſt continual Reflections, thoſe dark, gloomy Ideas fix ſo deep an Impreſſion on the Brain and Seat of the common Senſorium, that the leaſt Motion of the Nerves, ever after ſhall revive the Memory of theſe dark and deſpairing Thoughts. CHAP. 6.

IN the mean time, what vehement Emotions, Tremblings, Palpitations, and irregular Throbbings, the Heart often is affected with, when the Diſeaſe ariſes to this Heighth, they only can tell that endure the Conflicts.

THE Stomach often extremely ſuffers under this Diſeaſe, which frequently diſcharges, either by Vomitings, Rifts, or windy Belchings, acid, ſharp Juices, that

inflame the Mouth, Jaws, and Tongue, and ſet the Teeth on edge. The Patient frequently perceives his Breathing ſhort, with ſudden Stops and Jerks, as if his Breaſt was bound down with a Cord, that greatly oppreſs him with Anxietude and the Fear of Suffocation.

In Converſation they generally are touchy, ſuſpicious, and think every thing ſaid or done, is ſaid or done to their Prejudice; if two whiſper, they certainly are contriving ſome Plot againſt their Intereſt; and every one that pays them a Viſit is their Enemy, and only ſome By-Ends prevail'd on them to come and ſee them.

In the Progreſs of theſe Symptoms ſometimes they are affected with an obſtinate, ſullen Silence, and refuſe to anſwer any Queſtions, that are ask'd them: Under theſe Circumſtances the Spirits are depreſs'd, and chain'd down to the moſt diſmal way of Thinking, they poſſibly can arrive at, without ſtarting into the moſt gloomy Scene of melancholy Madneſs. They willingly revolve in

their Minds, all the moſt deſpairing Ideas, CHAP. 6.
that can crowd upon the Fancy; and if, by Chance, a ſudden Gleam of Light break in upon the Soul, and give them a placid Interval of chearful Ideas, yet this Dawn of Sunſhine, this pleaſant Period, immediately vaniſhes, and the Soul is again overcaſt with a Cloud of Paſſions that overwhelm his Thoughts, and almoſt reduce him to a State of Deſperation.

THUS far I have conſider'd the Symptoms and Changes that conſtitute the Spleen, Vapours, and Hypochondriack Melancholy, in both Men and Women; I ſhall now go on to diſcover, as well as I am able, the Conſequences of theſe Diſorders, and the fatal Stages they ſeldom ceaſe to make upon any ſudden, ſurpriſing, or unexpected Turn of Affairs, if not timely prevented by proper Applications.

CHAP.

# CHAP. VII.

## *Of the* SYMPTOMS *of* SPLEEN, VAPOURS, *and* HYPOCHONDRIACK MELANCHOLY, *when they degenerate into the natural, or religious melancholy Madneſs.*

The Melancholy Madneſs a moſt gloomy Scene.

I AM now come into the moſt gloomy Scene of Nature, that Mankind can poſſibly encounter, where nothing but Horror reigns; where the noble Endowments of the reaſonable Soul are often diſconcerted to a ſurprizing Degree, and this lordly Creature Man almoſt debas'd below the brutal Species of the animated Creation.

Definition.

MELANCHOLY Madneſs is a Complication of continual and unintermitting Horrors, that ſpares neither Body nor Mind. When this Affection is far a-

vanc'd

vanc'd into the Habit, the Patient appears to all that ſee him a moving Piece of Ruin, and wears his Soul in his Countenance, which is mark'd with all the Characters of Woe, Gloom, and Deſperation. He is loſt to himſelf, his Friends, his Country, and Relations; he is dark and benighted in the full Glare of Day, and trembles to behold the Face of the Sun, from an Apprehenſion, that it inſults his Miſery. He flies to his Couch, in hopes to bury his Cares, and lull his Soul into ſweet Slumbers: His Couch! miſerable as he is, denies to him that ſweet Eaſe and pleaſing Conſolation, and perplexes his Mind with Phantoms of Furies juſt ready to devour him.

Of the Symptoms of natural Melancholy Madneſs.

WHEN the Symptoms ariſe to this ſurprizing Height, which they ſeldom fail of, if not timely remedied, the Body then ſcarce feels the ſevereſt Uſage you can give it; the Reaſon of which is, that all, or moſt of the Nerves that afford the natural Senſations to the ſeveral Organs of the Parts are let down beneath their natural Standard, not unlike, tho' not ſo much, as in palſical Affections.

However,

PART II. However, the immediate Intercourſe between the Mind and Body, is by ſome Means or other greatly diſconcerted; and this is the Reaſon, why thoſe fineſt Senſations that ariſe from the ſeveral Appetites of Hunger, Thirſt, and Venery, are diminiſh'd, to a Degree ſcarce able to create an Attention to thoſe Cravings of Nature; and hence it happens, that they are able to endure Hunger, Thirſt, and Watchings, to a Time almoſt incredible, to Perſons not acquainted with ſuch Caſes; all which ſeveral Phænomena ſhall be accounted for, when we come to treat of the Cauſes of thoſe Diſorders.

Of the Symptoms of Religious Melancholy.

SOMETIMES this natural melancholy Madneſs is improv'd upon the Conſtitution, by a Set of religious Objects, and then it comes under the Denomination of religious Melancholy; in this Caſe, the Patient is either too much oppreſs'd with Fear, or over-preſuming; the latter moſt properly is call'd Enthuſiaſm; for theſe Objects of Fear or Preſumption are vary'd, exalted, or depreſs'd, according to the different Conſtitution or Temperature they reſide in. If the Habit be naturally

naturally of a phlegmatick Make or Disposition, then all the Ideas will be despairing. Hence arise their Diffidence, Scruples, and Fears, concerning the Sincerity of their Faith and Repentance, as also the Certainty of their Election or Reprobation; which several Points, from the preaching of some hot-headed Gospel-Ministers, are so strongly fix'd on the Minds of silly, weak, unhappy People, as to work them into a State of Despondency. 

THEN their Sins fly glaringly in their Faces, and are so infinitely great, that no Satisfaction can compensate; then they think of nothing but the fearful Wrath of God just ready to be pour'd out upon them; that the Sentence of Condemnation is already pass'd, and that they certainly shall be damn'd to all Eternity.

THUS, these unhappy Wretches go on to encrease their Woes, before bad enough, now made worse from the Objects of Despair. But thus much I must observe in Defence of Religion, that these Disorders are no way the Effects

of

PART II. of religious Duties, nor is Religion any way juſtly chargeable with their Conſequences; they are owing to the Temperature of the Body, which, whenever it ſtarts from its natural Standard, obliges the Mind to revolve upon thoſe Ideas, that were moſt familiar to it while it was in Health. And if the Patient was intent upon religious Duties in Health, he will certainly revolve moſt upon thoſe under this Diſeaſe; and as Fear, Sadneſs, and Sorrow, are the Pathogonomicks of phlegmatick Melancholy, he will naturally take religious Objects by the left Hand, and multiply the Duties of Religion above the Powers of human Nature to perform, and then quarrel with himſelf, for not doing what was above his Power to do, and what neither God nor his Laws exacted at his Hands.

THUS, this unhappy Wretch goes on from bad to worſe, always ſighing, groaning, and deſponding of Mercy, from a God infinitely merciful: In vain ſhall you tell him of the Satisfaction of his Saviour for his Sins; his Sins are ſo foul and

and enormous, that they are above all Satisfaction: No Blood can wash out the Stains of his Sins, nor blot out the black Catalogue of his Transgressions. CHAP. 7.

AND this is the Circle of Ideas, that the most religious Persons will naturally run through, while the Symptoms of natural Melancholy continue to oppress them; for Fear and Sadness, being relative Terms, have no Foundation or Meaning, when they are not referr'd to some Objects: It therefore naturally follows, that whoever fears, must have some Grounds for those Fears, either real or imaginary; if they be real Fears, then they must arise from some Cause that struck the Object of Fear upon the Mind.

Of Atheistical Madness.

BUT if this be the Fate of religious Persons under this Disease, let us change the Scene, and take a View of the Atheist or Libertine under the same Affliction. What Hope, what Refuge can he expect from a gracious God, whose Providence he has so often blasphem'd, ridicul'd and deny'd? Under the Symptoms of religious

ous Melancholy, the Mind was in Deſpair through Doubt; but here, even that Doubt would be the higheſt Pleaſure: He now perceives God's heavy Wrath ready to be executed upon him, and thinks he is already in Hell; himſelf is Hell, and ſuffers all the Pains of the Damn'd; he howls, he roars, and, in the Height of his outrageous Frenzy, blaſphemes God and his Religion: Where can he reſt his hopeleſs Hope! where ſeek for Mercy, when Conſcience, Horror, Deſpair, and all the diſmal Scenes of Woe, that can afflict the moſt obdurate Heart, fly glaringly in his Face, and ſting his tortur'd Soul, with Pain and Grief unſufferable to human Nature! Hence ſpring thoſe frequent Suicides, to which theſe harden'd Miſcreants have Recourſe, to rid them of a Life moſt loathed, wretched, and miſerable to endure. So that no Scene of Horror can be more dreadful, than to view an Atheiſt on his Bed of Sickneſs, juſt reviving to a Senſe of his being forſaken of God, and all Hopes of his Mercy.

CHAP.

# CHAP. VIII.

## *Of the* Symptoms *of* Spleen, Vapours, *and* Hypochondriack Melancholy, *when they degenerate into Lunacy and Enthusiastick Madness.*

THE Mania, or what we call Lunacy or the raging Madness, is only the foregoing Melancholy improv'd in a hot, bilious, sanguine Constitution; whereupon all the Impulses are strongly struck on the Seat of the common Sensorium, and the rational Soul divested of all its noble and distinguishing Endowments.

This Madness presents the Reader with a most dreadful Scene of Horror and Distraction; the Patient appears with a fierce, grim, and rough Aspect, his Reason is disturb'd, his Judgment con-

fus'd, and the Exerciſe of his Intellectuals is loſt and bewilder'd in a bottomleſs Gulph of moſt abſurd Cogitations.

Of the Degrees of Madneſs,

SOMETIMES the Fits of Lunacy ariſe beyond all the Bounds of Nature, and the Patients acquire a preter-natural Strength, greatly above the Power of the ſtrongeſt Man to oppoſe: They will break the ſtrongeſt Bars of Iron with a ſingle Impulſe, throw off their Bonds, Chains, and Shackles, to the Wonder and Surprize of all that ſee them; nor are they ſcarce ever tired, tho' they exerciſe their Bodies whole Days and Nights, and are almoſt continually without Sleep. They will endure the ſevereſt Uſage, with a ſteady and equal Mind; nor ſhall you perceive them at all ſcarce affected with the Extremes of Cold, Faſting, and Stripes, that are enough to ſink the Spirits of the moſt intrepid Mortals.

OTHERS, again, acquire a Swiftneſs of Foot, greatly ſuperior to the ſwifteſt Man. I myſelf knew a young Woman, that in the Height of her Lunacy, broke from her Keepers, and run ſo faſt, for near

near two Miles, that neither Man nor Horſe could overtake her, got into a River, and was drowned, before any could come to her Relief.

When once the Diſeaſe is ſuffer'd to ariſe to this Height, they are bold, impudent, and of a moſt revengeful Diſpoſition; apt to quarrel, and think, and ſpeak, and dream, if perchance they ſlumber or ſleep, of nothing but Battles, Combats, and their Manhood; they are furious and impatient in Diſcourſe; ſtiff, irrefragable, and prodigious in their Actions; and, if provok'd, moſt violent, outrageous, and ready to kill themſelves, and all others, that come in their Way.

They ſleep but little; their Urine is of a fiery, flameous Colour, and but little in Quantity; their Pulſe is quick, low, and very unequal, which certainly indicates, that the Fever is lodg'd upon the Nerves and Spirits, contrary to the Antients, that averr'd, that this Diſeaſe might be without a Fever; their Stools are white, hard, and but little in Quan-

PART II. tity; their Reſpiration varies, but generally is ſlow, and ſcarce perceiveable.

PERSONS, of the greateſt natural Parts, of the fineſt Genius's, and moſt elevated Imaginations, are often obſerv'd, in their Flights, to ſtart into Madneſs; for being naturally of warm, bilioſe Conſtitutions, it neceſſarily follows, that (while the aſpiring Soul is purſuing ſome lofty Thought, ſoaring to an uncommon Height, and teeming with the grand Diſcovery) the Impulſes prove too ſtrong for the feeble Brain to ſupport, the Intenſeneſs of Thought diſconcerts the ſlender Fibres, and the whole Magazine of moſt beautiful Ideas are ſhatter'd, and jumbled into the greateſt and moſt irregular Confuſion, by the Force of the labouring Imagination.

WHEN once theſe fineſt Fibres of the Brain, that immediately ſupport the regular Exerciſe of our Thoughts, have ſuffer'd ſuch a fatal Shock; no Operation of the Mind, that is regular, ſedate, and uniform, can ever after be expected; but all his Actions will be expreſs'd by ſudden Fits and Catches; and ſhew themſelves

ſelves in all the Diverſity of Characters, according to the prevailing Paſſions that ſtruck the Impulſe. Thus the gay and merry, the fond and loving, the angry, revengeful, or Scholaſtick Characters, ſucceed each other, by ſudden Starts and Sallies, according to the natural Paſſion he was ſubject to, before the Invaſion of the Diſeaſe. CHAP 8.

IF the Patient was proud, ambitious, haughty, or imperious, in his natural Temper, then, upon the Acceſs of the Lunacy, he will imagine himſelf metamorphos'd into a King, a Prince, or Viceroy; and demand ſuitable Attendance to the regal Power, princely Dignity, or noble Character, he ought to bear in the World, in caſe he was the very Perſon he takes himſelf to be: Thoſe of a fierce, ſavage, and cruel Nature, imagine themſelves transform'd into Wolves, Bears, or Tigers, and fancy they retain all the Ferocity of thoſe ſavage Animals.

SOMETIMES this raging Lunacy is improv'd upon the Habit of warm, bili- Of Enthuſiaſtick Lunacy

oſe Conſtitutions, from a Set of religious Objects, and then it ariſes to Enthuſiaſm; a Species of Madneſs quite different from religious Melancholy, and which produces different Effects: For whereas the Patient under the Symptoms of religious Melancholy, was greatly oppreſs'd with Fear, Sadneſs, and Deſpair; theſe, on the contrary, from an over-weening Opinion of their own Sanctity or Holineſs, are elevated to the higheſt Degree of Familiarity with their Maker: They are his Viceroys, choſen Saints and Servants, ſent on eſpecial Errands, to reclaim the unbelieving World.

WHEN the Brain is once well warm'd, then every groundleſs Opinion, or ſilly Fancy, that ſtrongly ſettles itſelf on their Minds, is an Illumination from the Spirit of God, and of divine Authority; and then every Impulſe that drives them on to any odd and ridiculous Action, is immediately a divine Call from Heaven; it's a Commiſſion from Above, and muſt be obey'd. If you tell them of Miſtakes, Errors, the Deluſions of their Senſes, or Suggeſtions of Satan, they will anſwer you,

you, that they ſee the Light infus'd, hear the Call, feel the Impulſe, and cannot be miſtaken; it's clear and viſible to them, as the Sun at Noon-Day, and conſequently needs no other Proof than its own Evidence: They feel the Hand of God moving them within, and the Impulſes of his Holy Spirit directing them in all their Enthuſiaſtick Thoughts, Words, and Actions. CHAP. 8.

OF this kind of Lunacy were the Ravings of *Naylor*, *Fox*, and *Muckleſton*, who certainly deſerv'd no Puniſhment for what they did or ſaid; ſeeing, that what they did or ſaid, was nothing but the Effect of mere Madneſs, and aroſe from the ſtronger Impulſes of a warm Brain.

FROM this Way of Reaſoning we may gather, that all theſe fantaſtick Agitations of our modern *French* Prophets, and other late Viſionaries, were nothing elſe but ſtrong convulſive Fits, which thoſe Wretches had habituated their Bodies to, from the Strength of

 their Paſſions, and a ſtrong Perſuaſion, that they were illuminated from Above.

SURPRIZING it is to conſider, how far this Enthuſiaſtick Zeal or Lunacy has carry'd many Perſons, in all other Reſpects, ſage, learned, diſcreet, and wiſe, when once it gets hold of their Tempers; and how difficult, or rather impoſſible it is, to perſuade them out of their Vagaries, and that all is but an empty Phantom, mere Deluſion, or the Reſult of a warm Brain.

NOW, in Anſwer to theſe ſuperſtitious Fooleries, give me leave to obſerve, that the ſtrong Perſuaſion of what a Man feels, ſees, or hears, can be no Evidence to another of his having a divine Miſſion, nor ought to be ſo to himſelf. Revelations communicated to holy Men, under the Old Teſtament Diſpenſation, always had ſome ſpecial, outward, viſible Aſſurances, to ſecond their internal Motions; they were not left to their private Perſuaſions alone, that it was an Impulſe of divine Authority; but had evident Circumſtances, viſibly

atteſting

atteſting the Power of thoſe Revela- CHAP. 8.
tions.

MOSES not only ſaw the Buſh burn without conſuming, but heard a Voice out of it; and yet thought not this Evidence ſufficient to legitimate his Miſſion to *Pharaoh*, till God was pleas'd by a ſecond Miracle to turn his Rod into a Serpent, and aſſur'd him of the like Power before *Pharaoh*.

GIDEON refus'd, at an Angel's Requeſt, to go and deliver *Iſrael* out of the Hands of the *Midianites*, till his Miſſion was atteſted by a Miracle from God; and our bleſſed Saviour himſelf did not upbraid the *Jews* with Blindneſs and Unbelief, till they reſiſted all the Evidences of thoſe ſurprizing Miracles, he wrought amongſt them for their Conviction.

THESE, and ſeveral other Inſtances, that might be given, are ſufficient, I hope, to convince any reaſonable Man, that the holy Prophets of Old, did not think an inward Perſuaſion of their own Minds a ſufficient Evidence, that

their

their Commiſſion was from God, or that they had Authority to alter the Rule of Faith, once given to the World for the Conduct of Life; unleſs they had viſible Circumſtances alſo ſuper-added to thoſe internal Illuminations to ſupport their Miſſion.

These ridiculous Motions, no Indications of the Holy Spirit.

If theſe fantaſtick Agitations, and wicked Enthuſiaſtick Vagaries, be a Mark of Religion, of the true Religion, it muſt be of ſuch a Religion as the Devil may act a Part in; for moſt of the Demoniacks that our Saviour is related to have diſpoſſeſs'd, were much in the ſame Manner affected, as our modern *French* Prophets are, during their pretended Fits of Inſpiration; and, excepting the *Sybilline* Prieſteſſes of old, who gave their Reſponſes in all the Rage and Fury of Madneſs, I am not able to inform myſelf, that any Pretences were ever made to the Holy Spirit, from ſuch odd, ridiculous, and wicked Enthuſiaſtick Motions.

The Apoſtles and their Succeſſors, in the earlieſt Ages of Chriſtianity, appeal'd to the common Senſe of Mankind,

kind, for the Reaſonableneſs of the Re- CHAP. 8.
velation, they had in Commiſſion from God, to promulge to Mankind ; and, by their moſt excellent Apologies, clearly demonſtrated, that the Chriſtian Syſtem, was infinitely preferable to the Religion of the Heathens, both in Regard to its moral Nature, and thoſe exceeding great Rewards it promiſes to all thoſe that lead their Lives agreeable to its divine Precepts ; ſo that, in a ſmall Space of Time, the Goſpel of Chriſt was preach'd and propagated in all the Kingdoms, Nations, and Provinces, of the known World, in Oppoſition to the moſt violent Perſecutions of its Heathen Adverſaries.

CHAP.

## CHAP. IX.

### *Of the moſt general Cauſes of the* SPLEEN, VAPOURS, *and* HYPOCHONDRIACK MELANCHOLY.

THUS far we have conſider'd the ſeveral Symptoms, that conſtitute the Spleen, Vapours, and Hypochondriack Melancholy, as well during the Intermiſſions of thoſe Diſeaſes, as when they are attended with Fits: I ſhall now proceed to unriddle their moſt general Cauſes, and ſhall conſider them in that Order of Nature, as they ariſe upon the Conſtitution; and the different Forces they impreſs upon the ſeveral Organs of the Body, in ōrder to produce the different Species of this Diſeaſe.

CHAP. 9.

No Cauſe poſſible in Nature without an Effect, nor Effect without a Cauſe.

BUT firſt I muſt beg Leave to premiſe ſomething concerning Cauſes in general, as well when they are regular as irregular, without any Regard to thoſe Affections, by Reaſon, that in the Progreſs of this Diſcourſe, we ſhall be oblig'd to take Notice of the Cauſes of oppoſite Symptoms: not, to ſpeak properly, that there can be an irregular Cauſe in Nature; for when Cauſes act, and do not produce thoſe viſible Effects, they are accuſtom'd to produce, we are apt to ſay, thoſe are the irregular Actings of Nature, or partial Cauſes; but in very deed the Cauſe was anſwerable to the Effect; and the Effect was the Reſult of the Cauſe acting fully up to the Degrees of all the Impulſe it was capable of.

WHEN we perceive ſome ſuppos'd Cauſes, not producing their natural Effects, or what we call their natural Effects; this muſt happen becauſe the Cauſes are defective, and therefore not properly Cauſes adequate to thoſe Effects, expected from them; but they

are

are Cauſes adequate to the Effects they produce, which is as much as they poſſibly can produce, in the ſame given Circumſtances.

The Cauſes in Nature always anſwerable to their Effects.

To handle this Point more clearly, upon which ſo much depends, we are to conſider, that, in monſtrous Productions, the Cauſes are never partial in Relation to the Effects; for the ſame Impulſe of the Matter and Motion, in the ſame given Circumſtances, would never produce any Thing but a Monſter: The Effects, in thoſe Caſes, are always anſwerable to their Cauſes; and the Reaſon why it was not a full-grown Child, compleatly form'd, is becauſe the Direction and Impulſe of the Cauſes forming this curious Machine, was inſufficient for perfecting the ſeveral Lineaments of a human Fœtus; but then they were effecting of as much as was in their Power to effect, and that was a Monſter or miſhapen Animal: And monſtrous Productions of all Kinds have their Degrees of Perfection accordingly, as they are more or leſs nearly reſembling of any Animals: So that the Cauſes may be ſaid to be partial in Relation to the Species,

Species, but impartial in reſpect to their genuine Effects. CHAP. 9.

IRREGULAR Symptoms, therefore, of the Spleen and Vapours, proceed from as certain, natural Cauſes, as thoſe that are moſt regular; but we call them irregular, or confus'd Symptoms, becauſe we cannot ſo clearly conceive an Idea of thoſe Cauſes, that produce them, as when they are more regular.

Irregular Symptoms of Diſeaſes have conſtant ſteady Cauſes.

NOW, that I may proceed with the greater Clearneſs, I ſhall beg leave firſt, to explain the Manner how the Powers of the Brain and Nerves are affected, in producing the Cauſes of thoſe Diſeaſes; after that, how thoſe Affections of the Brain and Nerves, produce thoſe huge Symptoms of Strength and Fierceneſs in the Hyſterick Fits and Madneſs, *ut ſupra Naturam res videatur*; in which I ſhall conſider the Matter neceſſary to excite thoſe Phænomena, and the extrinſical or remote Cauſes neceſſary to put that Matter in Motion, which will be the cleareſt Manner in explaining the Cauſes

of

WE have clearly discover'd, in the first Part of this Treatise, that the Sensations and Perceptions of the Mind, depend on the due Modulation of the Nerves; that this due Modulation consists in the Machinulæ of the foregoing Fibres, being set at equi-distant Spaces from each other, and within their proper Spheres of Contact; that, upon every Vibration of an Object, they might be able to excite a Sensation in the Organ; and that every Sensation should be able to produce a Perception in the Mind.

THAT, in all Cases, where those Machinulæ of the Brain and Nerves, either recede too far from, or are brought too near each other, there will be either a Contraction or Relaxation of the Fibres, which will be attended with the Sensation of Pain in the Fibre, and the Perception of Uneasiness in the Mind.

THAT the Uneasiness and Pain, will be in Proportion to the Tension of the

Fibres

Fibres, which will increaſe to a certain Point of Extremity, beyond which they will be void of all Pain, and the Mind void of all Perception, and conſequently there will be nothing acted upon the Organs above this State of Contraction. CHAP. 9.

THIS appears clearly to be the Caſe, both in ſome kinds of convulſive Motions, and palſical Affections, where all Senſation between our Thoughts and animal Fibres are entirely diſconcerted, or cut off; for the Mind having its proper Ubi, whenever the Directions of the Machinulæ, that compoſe the ſenſitive Fibres, are levell'd in their Motions, either above or beneath that proper Point, where the Mind reſides, there can be no Senſation, Perception, or Reception of Ideas. The Truth of this appears pretty clear, in the Senſations of Viſion, Hearing, and Feeling, which are all interrupted, in Caſe the Direction of the Fibres in their Motions, point either above or beneath this proper Ubi, which I take to be the Centre of the Brain, where all the Fibres of the Organs, that ſerve the ſeveral Senſes, point in their Origination.

To apply this Reaſoning to the Spleen, Vapours, and Hypochondriack Melancholy: As all Senſation depends on the proper Structure of the Brain and Nerves; ſo theſe Senſations will be conſiderably increas'd or abated, in Proportion as the Motions of the foregoing Powers are more or leſs intended or remitted. And as the Mind only ſees, hears, imagines, and underſtands, by the Aſſiſtance of theſe curious Inſtruments, and the Organs they compoſe; ſo will it neceſſarily follow, that whenever, from any Cauſes, theſe happen to be vitiated, or recede from their due Modulation, the Senſations and Intellectual Faculties muſt ſuffer in the Change.

The Diſeaſe ariſes from a too great Relaxation of the nervoſe Machinulæ of the Brain and Nerves.

THESE Affections of the Spleen, *&c.* independently of their Fits, moſt certainly ariſe from a too great Dilatation of the nervoſe Machinulæ, that compoſe the contracting Powers of the Brain and Nerves; that is, when their Machinulæ are ſet at too great a Diſtance from each other, whereby the Fibres of every Muſcle are let down beneath their natural

natural Standard; which is the Reaſon why many People complain of ſuch a Wearineſs in their Limbs, and Unaptneſs to Motion; this proceeds, not ſo much from any Unwillingneſs of the Mind, as Inability of the Body to move; for it is the Condition of every one in Health, that the contracting Powers of the nervoſe, as well as arterial Solids, ſhould be equal to their diſtracting Powers; that is, in Proportion as the Machinulæ of the Solids, in every Syſtole for propelling the Motion of the animal Fluids, are contracted; juſt ſo far ſhould they recede from each other, when the Impulſe or Action is over. CHAP. 9.

Now in all Caſes of the Spleen, Vapours, and Hypochondriack Melancholy, eſpecially when theſe Affections have got any faſt Footing in the Conſtitution, the Fibres of the Muſcles, and other Veſſels, are ſo relax'd, that they cannot aſſiſt the Mind in voluntary Motion, nor ſcarce the Veſſels in propagating the natural Motion of the Fluids; upon which they attract each other, and form a thick,

viſcid, melancholy Blood, unfit for the Motions and Secretions of the Animal OEconomy. Hence ariſe Obſtructions in the Nerves, that purſe up their Fibres, ſhorten their Contractions, and conſequently excite a Convulſion in the Organ, or Part, where the Obſtructions happen.

To make this Point a little more clear, I ſhall beg Leave to obſerve, that whoſoever carefully attends to the Nature of the Spleen, Vapours, and Hypochondriack Melancholy, and the Fits or Paroxyſms that frequently happen, at certain Intervals, will eaſily diſcover ſomething of a mix'd Nature, in Relation to the Eſſence of theſe Diſeaſes; that is, he will perceive Symptoms partly palſical, partly convulſive. The Cauſes of the former ariſe from a Relaxation of the Nervoſe Fibres diſſeminated in the Organ, Bowel, or Part, where the Symptoms are ſeated, in the ſame Manner, as the Cauſes of chronick Diſeaſes ariſe from a Relaxation of the arterial and muſcular Fibres of the ſeveral Organs; whereupon theſe ſeveral

The Symptoms partly palſical, partly convulſive.

Parts

Parts are incapable of making the Dis- CHAP. 9.
charges neceſſary to preſerve the Body in Health.

How the Fits are form'd.

NOW the Fits or Paroxyſms in chronick Diſeaſes, anſwer exactly to theſe convulſive Motions, we frequently obſerve in the Fits or Paroxyſms of Spleen and Vapours; both are exerted for the ſame Reaſons, and to obtain the ſame Ends; both exert Motions ſuperior to what the regular Conſtitution of the Body requires they ſhould be; and theſe mechanical Motions, thus exerted, are neceſſarily inferr'd, both to fling off a Load of Matter oppreſſive to the Conſtitution, and to reſtore the diſaffected Fibres to their regular Tone again; and theſe Intentions they certainly would effect in both theſe Caſes, were it not, that the Fibres of the Nerves and Arteries remain under a State of too great Laxity, after the Violence of the Fits are over.

AND as the acute Paroxyſms, in intermitting Fevers, Agues, Aſthma's, *&c.* are the Efforts of Nature, to disburthen the Conſtitution of that Load of Matter, that

forms these different Diseases; so the hysterick Paroxysms and these convulsive Tremors, that often attend splenetick Diseases, are exerted from the same Efforts of Nature to restore the Nerves to their due and regular Standard again: And as the Heart is the main Spring of Action in the Fits of chronick Diseases, so the Brain, with its frequent, irregular * Systoles, greatly promotes these inordinate, spasmodick Motions, in the Fits of the hysterick Disease.

* Systole of the Brain signifies its Contracting Power, whereby the animal Juices are forcibly driven into the Fibres of the Nerves.

The hysterick Fits have a very near Resemblance to the Epilepsy.

It's true, we have no Pathogonomicks to distinguish convulsive Motions attending the Epilepsy, from those that accompany the Hysterick Paroxysm; but whenever convulsive Motions affect the nervose System in Women, they are call'd Hysterick Fits, in Men the Epilepsy. And, indeed, from the Community of Symptoms, after the best Observations I have been able to make, I cannot but be of Opinion, that the Epilepsy is the same in Men, subject to the Spleen and Hypochondriack Melancholy, that Hysterick Fits are to Women labouring under the Vapours. And if it be objected, that

all

all Hypochondriack Men do not ſuffer from Fits of the Epilepſy; I grant it: but then this Objection will be of no Force, becauſe neither do all vapouriſh Women ſuffer from Hiſterick Fits. CHAP. 9.

THESE Fits, neither in the one, nor the other, are inſeparable; they require a great Degree of the Diſeaſe, as well as ſtrong Cauſes, to put the Nerves upon this mechanical Neceſſity, in order to diſlodge the Diſeaſe in ſuch a furious Manner. Leſſer Cauſes are often flung off by Yawning, Gaping, ſlight Twitchings of the Nerves, or Sneezings; as we obſerve in frequent Sinkings of the Spirits. That Sneezing is of Service in ſuch Caſes, to diſlodge the Vapours, is evident, from the Relief it immediately gives in diſengaging the Spirits from their Preſſure.

INDEED ſome Writers have endeavour'd to account for the Cauſes of all theſe Diſorders from Indigeſtions, and acid ſharp Humours, the Conſequence of theſe Indigeſtions. But granting, to theſe Gentlemen, all they contend for, yet even

then this Queſtion recurs; from whence do theſe Indigeſtions and ſharp Humours ariſe? From whence ſhould they ariſe, but from a Relaxation of the muſcular Fibres in the Stomach, which are ordain'd by Nature for the Aſſiſtance of this important Office of Digeſtion. And may we not, with equal Reaſon, go on to enquire, from whence that Impairation of the muſcular Fibres of the Stomach ariſes? From whence, I pray, can it ariſe, but from our too great Indulgence in Eating and Drinking, and a too lazy, indolent Diſpoſition of Life conſequent thereupon.

A Reaſon why Country Gentlemen are not ſo much harraſs'd with the Spleen as Citizens.

THE Reaſon, why Country Gentlemen, who eat and drink plentifully, are not ſo much harraſs'd with Spleen and Vapours, as moſt of our Citizens are, is, becauſe they generally labour more in the Exerciſes of Hunting, Riding and Walking, which fling off thoſe Overcharges that muſt have over-born the Body with a Diſeaſe, had not the Purſuit of thoſe wholeſome Meaſures reliev'd it; yet even ſo, many of theſe eſcape not free; for if they continue frequently

quently to over-charge the Blood with unfriendly Juices, or thoſe that may prove ſo, in Reſpect of their Quantity, they fail not to over-power the ſtrongeſt Conſtitution, and generally prove fatal at the laſt. So that the Obſervation, that *Solomon*, the wiſeſt of Men, was pleas'd to make concerning the fatal Effects of Wenching, may, not unfitly, be apply'd to Exceſs of Eating and Drinking : *That they have caſt down many ſtrong Men*; *yea, many mighty Men have been ſlain by them.*

CHAP.

# CHAP. X.

## *Of the immediate Cauſe of* SPLEEN, VAPOURS, *and* HYPOCHONDRIACK MELANCHOLY.

IN the former Chapter I treated of the Cauſes in general, without any Regard to the Cauſes of particular Symptoms: In this I ſhall go on to diſcover the immediate Cauſe of thoſe Characters that conſtitute the different Degrees of the Spleen, Vapours, and Hypochondriack Melancholy thro' all their different Stages.

The Error of the Ancients.

IT was the Opinion of all the ancient Phyſicians, that theſe Diſorders aroſe from a Faultineſs in the Spleen; but upon examining the Cauſes, according to the genuine Laws of Nature, we ſhall diſcover,

discover, that the Spleen is no otherwise concern'd in producing this Disease, than as it suffers in the general Calamity of the Body; for the Stomach, Liver, and Intestines are as much to be esteem'd Causes, as the Spleen; because they are subject to be equally affected with the foregoing Organ. CHAP. 10.

THE immediate Cause of the Spleen therefore, is to be discover'd much in the same Manner, as the immediate Cause of the Scurvy, that is, from the general ill Habit of the Constitution; and, I must declare, that, from the best Observations I have been able to make, several splenetick Symptoms seem so complicated with those of the Scurvy, that it is impossible, accurately, to handle the Causes of the one, without, in some Measure, taking Notice of those of the other, because very few suffer under the Spleen, that are not, in some Degree, affected with a scorbutick Taint at the same Time.

NOW as Wind supplies us with the greatest Number of Symptoms, in the

Spleen,

PART II. Spleen, Vapours, and Hypochondriack Melancholy; and, as their firſt Scenes are generally acted in the Stomach, ſo will it be highly proper, that I firſt conſider their Production, before I proceed to examine the Cauſes, that affect the other Organs of the Viſcera.

NOTHING can be more certain than that the Organs of every Part are compos'd of Veins, Nerves, Arteries, and other Veſſels ſubſervient to the Laws of the circulating Fluids, which convey a Liquor for the Nouriſhment of the ſeveral Parts; and as the Veins and Arteries afford Heat and Motion, ſo the Nerves give Strength and Senſation to every Part. To theſe Inſtruments united, the Stomach owes its contracting Force, the Inteſtines their periſtaltick Motion, and the Lungs their contracting and dilating Powers.

Of the Cauſe of windy Rifts, Belchings, and other Tumults in the Stomach and Inteſtines.

WHILE the muſcular Fibres of the Stomach are capable of digeſting the Aliments, and reducing them into a proper Chile, the ſame Powers will readily diſcharge it into the Inteſtines or Guts,

to

to be receiv'd into the Lacteals, without the leaſt Stop or Hindrance. But if, through a Languor or Weakneſs in the muſcular Fibres, the new-made Chyle, or Meats ſcarce digeſted into Chyle, continue in the Stomach longer than is conſiſtent with the Laws of Nature, then, by the Heat, Hurry, and Tumult of this Bowel, a great Quantity of Wind will be generated, which will make its Way, according to the greater or leſſer Reſiſtance it meets with, from the greater or leſſer Force of the muſcular Fibres, that compoſe the ſuperior or inferior Orifice of the Stomach.

IF the Reſiſtance be leaſt in the ſuperior Orifice, then this Wind will force its Way upward by the Mouth, and diſcharge itſelf in windy Gulps, Rifts, and Belchings; and the longer theſe Meats lie in the Stomach, after they begin to digeſt, the greater Quantity of Wind is ſent off from this Organ; which ſometimes is ſo hot, as almoſt to inflame the Gums, Jaws, and Parts adjacent; ſometimes ſo acid and ſharp withal, as almoſt to ſet the Teeth an Edge.

Of the Cauſe of rumbling Pains in the Bowels.

BUT if this Wind is not able to diſcharge itſelf by the upper Orifice of this Organ, it is then impell'd into the Inteſtines, always forcing its Way into thoſe Parts, where it meets with leaſt Reſiſtance, according to the Nature of all Fluids equally preſs'd; and, in this Deſcent, by differently diſtending the Coats of the Inteſtines, it furniſhes out thoſe windy, rumbling Pains, thoſe croaking Noiſes, and quarrelling Conflicts, that moſt vapouriſh Women are ſubject to ſome time after a full Meal, or a little before the Invaſion of the Hyſterick Paroxyſm; nor do theſe windy Diſorders end here, for they often get into the Fibres of the Stomach, and create a Cardialgia, which is a moſt exquiſite Pain in its ſuperior Orifice or Pit, that abounds with moſt ſenſible Fibres; and not ſeldom are the ſame Cauſes concern'd in generating thoſe ſevere nervoſe Hyſterick Colicks, that often become habitual, where this Diſeaſe has been of any conſiderable Standing.

Of the Cauſe of wandering Pains, Stitches, and Rheumatiſms.

SOMETIMES this Wind gets into the circulating Fluids, as appears in thoſe that

that have great, large, ſwollen Veins, which being determin'd into the Membranes and Fibres of the Muſcles, excite wandering Pains, Stitches, and Rheumatiſms, in divers Organs, which move from Part to Part, from Bone to Bone, now in one Place, then in another, anon in the Back, then in the Belly, Shoulders, Neck, or Crown of the Head; from which, at one ſudden Start, it ſhall deſcend into the Stomach or Limbs; not that this Halitus or ſubtile Flatus indeed takes thoſe ſudden Flights, but only, to the Patient, ſeems ſo to do; for the Nerves being in divers Parts contracted, in thoſe contracted Parts the Senſe of Pain will be felt; but as ſoon as the Workings of the Fibres have diſpers'd the Cauſe of Pain in one Part, the Fibres of other Parts will contract, it may be, a good Diſtance from the former; upon which, becauſe the Patient perceives the Pain to ceaſe in one Part, and ariſe in another, he is apt to think, that the ſame Pain makes a Tranſition from one Part to another; and thus we diſcover, with the greateſt Certainty, that the Nerves, the Brain, the Arteries, the muſcular Fibres,

and

and Membranes, are all more or less affected under the Spleen, Vapours, and Hypochondriack Melancholy.

How far the Spleen is concern'd in generating these Disorders.

AND as several Authors have endeavour'd to derive the Cause of those Disorders, from a Faultiness of the Spleen, I shall consider the Indisposition of this Organ, and how far it is capable of producing these Affections. The Spleen is an Organ, whose Office or Cause of Action, Philosophers, as well as Physicians, in vain have attempted to discover; however, I shall only consider the Nature of this Organ under a healthful Temperature, and the Changes it suffers in Splenetick Diseases.

UNDER a State of sound Health, the Spleen appears of a dark, livid Colour, and all its Parenchyma, as well as Blood Vessels, are free from Obstructions, which, in the Hypochondriack Melancholy, are stuffed with a Load of dark, heavy Matter, that often swells it to an unusual Bigness; from whence, therefore, these Obstructions? from whence this Change of Colour, and that Charge of dark

Matter,

Matter, that we often in Diſſections, perceive morbid Spleens to abound with, and which *Hippocrates* call'd the large Milt. Theſe Diſorders certainly ariſe from a Relaxation of the ſplenick Veſſels, and the Corpuſcles of the Fluids running into too cloſe Contacts, as they circulate through that Organ. This is the Reaſon why a Numbneſs and heavy Pain generally affect the left Side of Perſons ſubject to this Diſeaſe; and why the Spleen is ſo incident to be affected with ſchirroſe Swellings in the laſt Stages of the Hypochondriack Melancholy.

The Liver alſo often, under the Spleen and Vapours, ſuffers the ſame Inconveniencies; and detaches a vaſt Quantity of Bile into the Inteſtines; this Charge, by an Inverſion of the periſtaltick Motion of the Guts, aſcending into the Stomach, excites thoſe ſevere, bilioſe Vomitings, that torment ſeveral hiſterick Women in ſuch a cruel Manner. In others again, the bilioſe Ducts are ſtopp'd in the Courſe of the Diſeaſe, and then the hiſterick Paroxyſm terminates in the Jaundice.

The Liver often ſuffers under the Spleen, and why.

THOSE Inequalities of Heat and Cold, ſo evidently perceivable in divers Parts of the Body, ariſe from the Degrees of Impulſe, that differ in ſome Parts from what they are in others, and which depend on the different Elaſticity of the Fibres, that enter the Compoſition of theſe different Parts; and this is the Reaſon why the Brain is ſometimes like an Oven with Heat, while all the extreme Parts are cold, lifeleſs, and little different from a Perſon expiring.

Of the Cauſe of Heat afflicting the Head and Brain.

THIS Heat of the Brain generally ſucceeds that Chillneſs of the extreme Parts; all which Phænomena ariſe from a Languor of the Solids in the Surface of the Body, ſcarce able to maintain the Circulation, whereupon the perſpirable Glands are obſtructed, and the perſpirable Matter flung upon the Heart, which obliges this Organ to redouble its Action, and drive the ſuperfluous Humours up into the Brain; upon which its Fibres redouble their contracting Powers, and excite all that Conflict and Uproar, that is acted on the Theatre of this

this important Organ; hence ariſe thoſe ſhooting Pains, that dart through the Head, thoſe thumping Pulſes that beat about the Temples, as if ſome live Thing was lodg'd within-ſide of the Skull. CHAP. 10.

AND whereas ſome People ſubject to the Spleen, ſenſibly perceive as great a Thumping in the Inſide of the Head, as if a Hammer was ſtruck on an Anvil; this ariſes from the Motions of the Fibres, that compoſe the fineſt Nerves, being made too brisk on the Seat of the common Senſorium, whereby the Mind is too exquiſitely ſenſible of the Impulſe.

To explain this in the cleareſt Manner, we are to conſider, that part of the nervoſe Fibres that immediately derive their Exiſtence from the Brain, are obſtructed; whereupon a larger Quantity of thoſe animal Fluids are detach'd by the unobſtructed Fibres, and which, neceſſarily coming with a greater Force, makes the Senſation ſo much the more exquiſitely ſenſible: So that the Patient does not only perceive an Imagination of a Beating or Thumping in

the Inside of his Skull, but an actual, disorderly Impulse is lodg'd in the Brain, from which arises this too acute Perception.

Of the Danger of neglecting these Disorders.

AND this is the Rise and Origine of these Disorders and Complaints, that knowing Men sometimes resolve into Whim and Fancy, and which often terminate in Palsies, Apoplexies, or other nervose Diseases, that frequently endanger the whole animal Fabrick: And, in short, I have known several Cases, where these Disorders have so long been treated as Whim and Fancy, and the Patient rally'd out of his well-grounded Fears; that, struck with a sudden Stroke of an Apoplexy, it was too late to prevent the fatal Consequences that ensu'd.

AND seeing, that, under the gloomiest State of the Hypochondriack Melancholy, there frequently breaks in upon the Soul sudden Gleams of Light, and chearful Rays of Gladness; whereby the Patient, that, but just before, was depress'd to the lowest Ebb of Despair, is now elevated to the highest Pitch of

Joy

Joy and Delight; we are to consider, that these so sudden Changes, must have as sudden Causes, which generally arise from the Air, or some other of the Non-naturals, suddenly altering the Springs of the nervose Fibres, which as suddenly alters their Motions, and forces these stagnant Spirits thro' those Pores of the Brain, that they were unable freely to pass before. The animal Spirits therefore finding a free Passage, strike the Seat of the common Sensorium with a regular Impulse; upon which the Mind is glad to perceive itself disengag'd from that Thraldom it but just before was chain'd down to: And this heightens the Joy the more, as it is thus suddenly made; for we perceive, even in a State of Health, that the greater is the Apprehension of Danger, the greater is the Satisfaction upon our Releasement; and something is always to be allow'd, for the Greatness of the Danger, and the Suddenness of the Recovery from that Embarrasment.



THESE Sinkings of the Spirits, or Sadnesses, that oblige some vapourish Women

From whence these sudden Fits of Crying arise.

PART II. Women to burſt into ſudden Fits of Crying, without any evident Cauſe, ariſe from great Depreſſions of the Mind, that damp the Paſſions, retard the Motions of the Nerves, and make us low-ſpirited; and all Lowneſſes of the Spirits, and Sadneſſes of the Mind, relax the Machinulæ of thoſe Fibres, that compoſe the optick Nerves and Glandulæ Lacrymales depending on the Structure of theſe Nerves, whereby the Lymph, that compoſes the Matter of our Tears is protruded into our Eyes, which give us the livelieſt Idea of Weeping; and when theſe lacrymal Glands are ſo far relax'd, as to be incapable of contracting their Springs, there is a Fiſtula Lacrymalis form'd near the great Canthus of the Eye.

CHAP.

# CHAP. XI.

## *Of the Causes that disconcert the noble Organs of Seeing, Hearing, Tasting, and Feeling, under the* SPLEEN, VAPOURS, *and* HYPOCHONDRIACK MELANCHOLY.

THUS far, having proceeded to account for the Causes of the various Phænomena that affect the Stomach, Bowels, and other Organs of the Body; I shall now proceed to examine into the Grounds of those Symptoms that disconcert the Objects, that enter by the Instruments of the principal Senses.

IN optical Organs that are free from all Manner of Obstructions, the Rays of

PART II. Light have a Power to pierce the Pupilla, and form the Image of the Object upon the Retina; and this we call distinct Vision. But if any Disorders happen, that may affect the Elasticity of those Fibres, that compose the Membranes of this curious Organ, then the Secretions of the several Humours will be abated, and larger Corpuscles of Matter float in these Humours, than is consistent with the Standard of their natural Motions; upon which, as they pass before the Pupilla, they will darken these little Spaces, or Points of the Air, and intercept those Rays of Light, that lie in Lines parallel to the Axis of the Retina: So that these Corpuscles moving in the Eye, will appear in those intercepted Rays, as if real Flies or Motes were moving backwards or forwards in the Atmosphere; and where these Disorders are suffer'd to go on, they generally affect the Eyes with Suffusions, Films and Cataracts that intercept the Rays of Light and Colours, and, in time, totally destroy all the Objects of Vision; so that here is a real Cause in the Fibres, a real Matter in the Humours

From whence those Clouds, Mists, and dark Spots in the Air.

mours of the Eye, that excites a real Appearance or Phænomenon in the Air, which ſome People are pleas'd to call Whim and Fancy. CHAP. II.

Of the Cauſes of thoſe tingling Noiſes in the Ear.

THE ſame Inconveniences we often diſcover in the Organ ordain'd by Nature for the Conveyance of Sounds, which is liable to be affected under the Spleen, with divers diſagreeable Noiſes very diſturbing to the Patient: For, whereas, in order to render the Ear ſuſceptible of the natural Impreſſions of Sound, it is neceſſary, that the Machinulæ of the Fibres, that compoſe the auditory Nerve, be exactly modulated, and thoſe Fibres finely diſplay'd on the Drum of the Ear; now it often happens, under this Diſeaſe, that theſe Fibres are too much contracted, whereby this Organ is render'd ſo ſenſibly acute, as to be ſuſceptible of the ſmalleſt Impreſſions from the leaſt Waft of Air, that breathes in the Atmoſphere; and this is the Reaſon why the Patient is moſt incommoded with theſe diſagreeable Sounds in wet, hazy, or overcaſt Weather; when

PART II. when the Air is crouded with Abundance of moiſt Corpuſcles, that may too much contract the Fibres of the Drum: So that theſe Changes in the Atmoſphere naturally infer thoſe Changes in the Structure of the auditory Nerve, whereby it furniſhes to the Mind theſe hiſſing, ſinging, tingling Sounds, that ſo ſenſibly affect the Ears of vapouriſh People; and which, if ſuffer'd to continue, not ſeldom infer an irrecoverable Deafneſs in this Organ.

Of the Cauſes that vitiate our Taſte.

BUT, not only the Eyes and Ears are thus affected under theſe Diſorders, but even the Taſte and Feeling, are often vitiated to a ſurprizing Degree; for, as I have obſerv'd, in the firſt Part of this Work, that in order to produce the Senſation, or Perception of Taſtes, or to give the Mind a new Idea, by the Organ of the Tongue, which it had not before, it has pleas'd the Author of our Nature to endue this Organ, with a fine, curious Membrane, conſiſting of numberleſs Papillæ, capable of affecting the Mind, with more or leſs agreeable Senſations,

ſations, or what we call Taſtes, accordingly as they are ſtruck with reliſhing Objects, more or leſs pleaſing. CHAP. II.

Now it often ſo happens, that theſe Reliſhes ſtrongly affecting the Mind by their Impulſes, as ſtrongly incline it to deſire their Return; which, being too often comply'd with, in time impair the Action of thoſe fineſt Glands, on whoſe Motions thoſe fineſt Reliſhes depend. And thus we account for theſe different Affections of the Taſtes, that ſome People actually perceive under a Fit of the Vapours; that is, why the moſt reliſhing Meats ſhall appear to ſome taſteleſs, while others ſhall perceive the moſt inſipid Meats as hot as Pepper.

The Cauſes of theſe different Affections ariſe from the Machinulæ of the papillary Glands, in the former, being too much relax'd or palſical, which deſtroys the natural Senſation of the Taſte, while, in the latter Caſe, they are too much contracted; whereupon, the lighteſt Impreſſion, from the moſt inſipid Objects of Taſte, affects them with as ſtrong a Twang as if Pepper

was

PART II. was apply'd to the Tongue. In both theſe Caſes the Nerves of this Organ are receding from that natural Rectitude, whereby the Contact of the Object, or the natural Impreſſion of the Idea of the Object, may freely paſs up to the Underſtanding. And theſe Affections in this Organ generally ariſe from a vitious Diet, that impairs not only this particular Part, but the principal Organs of the animal Conſtitution, whereby all the nobleſt Senſations are abated, to a ſurprizing Degree.

Of the Cauſes that diſturb our Sleep.

AND here I cannot but take Notice of the Reaſon why ſplenetick People ſeldom take any ſound Sleep. This Wakefulneſs ariſes from the Fibres of the Brain, being continually in Motion, which keep the Faculties attentive to theſe Ideas, that ſucceſſively enter by any of the Senſes, for it is neceſſary, in order to procure ſound Reſt or Sleep, that the Nerves of the Brain abate their Motions; and this Abatement Nature has deſign'd, in order to recover their Elaſticity; that is, to reſtore their Machinulæ to a nearer Contact with each other, whereby the

Mind

Mind may exerciſe its Faculties with greater Vigour; ſo that the Time of waking is a State of Violence, or a Time of wearing out the Conſtitution; as the Time of Sleep is a Time of recovering the Fibres from thoſe Relaxations they are ſubject to through a too great Attention to different Ideas; for the Impulſes, under all ſplenetick Diſeaſes, are greater than what the Objects demand for their natural Conveyance under a regular State of Health; and when the Impulſe, conveying any Idea, is thus briskly made on the Seat of the common Senſorium, it muſt needs follow, that this Briskneſs will excite a greater Perception in the Mind; and this greater Perception, naturally over-power the Inclination to Sleep; and this is the Reaſon why People, far gone in the Spleen, lie whole Days and Nights, without ſo much as cloſing their Eyes, or being able to take the leaſt Slumber.



AND, for the ſame Reaſon, theſe People ſeldom ſleep without Dreaming, becauſe the nervoſe Fibres, that compoſe

PART II. poſe the ſeveral Organs of the Senſes, are ſo ſtrongly agitated, during the Time of Sleep, as to awaken the Imagination, and keep it attentive to whatever Ideas thoſe Motions repreſent to its View; for, in Dreaming, the optick Organ being affected, affects all thoſe Fibres of the Brain, from whence it derives its Exiſtence, which are all theſe Fibres of the Brain, where the Imagination reſides; ſo that the Organs of the Senſes have a Power to revive Ideas, that depend not upon the immediate Preſence of Objects, but only the Degrees of their own mechanical Motions; for theſe Motions, being increas'd in the Organs, are alſo, from the ſame Laws of Mechaniſm, increas'd in the Fibres of the Brain, whereby they ſtrike the Imagination with any Object, or the Idea of any Object, they are capable of conveying.

THUS, to dream of being elegantly entertain'd at a Banquet, with all Manner of delicious Dainties, and fine Muſick, it is neceſſary that the Motion be increas'd in the Optick, in the Auditory, and Nerves, that ſerve the Senſe of Taſting,

Tasting, because all these Senses are concern'd in compleating the foregoing Scene. 

FROM the same Causes, I am apt to think, arise most of those odd and out-of-the-way Phænomena that some credible Persons report they have seen and heard, when awake, which only arise from a greater Motion in the sensitive Organs, that greatly agitates the Mind, by strongly moving those Fibres, on which the Exercise of its Faculties depend. Thus, for Example, that a worthy Gentleman should see a moving Coach and six Horses pass thro' a Field, that it was impossible for them to pass thro'.

That the irregular Motions of the sensible Organs are able to bring the Ideas of Objects into View, as well when awake, as asleep, without the immediate Presence of the Objects to excite those Perceptions.

In Relation to this Phænomenon, I firmly believe, that the Idea of a Coach and six Horses pass'd before his Eyes, from a greater, internal Motion or Impulse made on the optical Organs; but deny that the Object was actually there; for there are certain Ideas of Objects, that always appear to the Mind, upon such and such Degrees of Motion being communicated to the Organs; and these Ideas thus appearing, are, not unfitly, call'd our waking Dreams.

CHAP.

## CHAP. XII.

### *Of the Cauſes that diſconcert the noble Endowments of the rational Mind, under* MELANCHOLY MADNESS, *and* LUNACY.

FROM the Reaſonings and Arguments of the foregoing Diſcourſes on the Nature of the Symptoms, it clearly appears, that melancholy Madneſs and Lunacy are only the Spleen and Vapours improv'd, in different Conſtitutions, when not reliev'd by timely Applications; and, if ſo, it neceſſarily follows, that they muſt ariſe from the ſame Cauſes, more highly advanc'd into the Habit, which render all the Symptoms more dejecting in the melancholy Madneſs, and more bold, furious, and violent, in Lunacy, or the maniacal Madneſs.

I SHALL

CHAP. 12.

I SHALL, therefore, go on to diſcover how theſe Cauſes act, in order to diſconcert the noble Endowments of the rational Mind, which, indeed, would be above our mechanical Philoſophy to explain, did not daily Obſervations aſſure us, that the Soul, while confin'd to theſe Walls of Fleſh, follows the Direction of the Fibre; and is vary'd, exalted, or depreſs'd, in Proportion as the nervoſe Solids are differently intended, or remitted: So that, ſo long as this governing Principle, the Soul, reſides in its proper Vehicle, that is, a Brain regularly conſtituted to receive the Impreſſions of Objects, by the Mediation of the Senſes; ſo long will it exert all its Operations of Thinking, in a regular Manner: But if, from any Cauſes, the Brain and Nerves that ſupport this thinking Being, ſtart from their natural Standard, then, the intellectual Faculties themſelves, that have any Dependence on theſe animal Motions, will faulter in their Operations; upon which will follow all thoſe odd, ridiculous, and abſurd Changes that People, in all other Reſpects, wiſe, diſ-

PART II.

creet, and prudent, fancy of themſelves; which being improv'd upon the Habit, conſtitute thoſe different Species of melancholy Madneſs and Lunacy.

Of the Cauſe of melancholy Madneſs.

UNDER the melancholy Madneſs, we perceive the deepeſt Fear, Sadneſs, and Deſpair; which Symptoms, with all their Concomitants, moſt aſſuredly ariſe from a Want of Spirits, from a Laxity of the Fibres that compoſe the Brain and Nerves, and from a thick, heavy Blood, unfit for Secretion, the Effect of that Laxity; for the Reaſon why the Mind is ſo deeply diſtreſs'd with dark gloomy, melancholy Ideas, ariſes from a Defect of Spirits; and the Reaſon why the Spirits are defective, is owing to a thick, groſs, heavy Blood; and the Reaſon why the Blood abounds with theſe vitious Qualities, is, becauſe the Fibres that compoſe the Heart and Arteries are relax'd, and, becauſe, under theſe Relaxations, the attracting Principle in the Corpuſcles of the Blood is increas'd above the natural Standard of Health.

AND,

AND, in Caſe the Patient falls into the moſt gloomy State of this Diſeaſe, then the Machinulæ of all the Fibres in the vaſcular Syſtem are relax'd to a ſurprizing Degree; upon which the bodily Organs will be unable to perform their reſpective Duties; for this Reaſon their Digeſtions are ſlowly finiſh'd, they perſpire little, and their Diſcharges by Stool and Urine, are in ſmall Quantities, and not often; from whence it neceſſarily follows, that the Cravings of Suſtenance, will be conſiderably leſſen'd in them, to what it is in others, under a ſound State of Health; and thus we account for the Reaſon, why melancholy People ſeldom eat, drink, or ſleep. Theſe Affections happen becauſe the Machinulæ of thoſe fineſt, ſenſible Fibres, that compoſe the Organ of the Stomach, are ſo relax'd, that their Vibrations are incapable of affecting the Mind with the regular Perception of Hunger, or to demand a proper Quantity of Liquids to dilute the Blood under the moſt intenſe Thirſt, when the Habit is almoſt dry for want of Recruits; ſo that they often go on whole

PART II. Nights and Days without eating the leaſt Morſel, or taking the leaſt Drop of any Fluid to ſupport Nature; and ſometimes fall a Sacrifice to their obſtinate, ſullen Humour.

Of the Cauſe of religious Melancholy.

IF the Patient be of a religious Diſpoſition, his Thoughts will naturally be taken off from the Ideas moſt familiar in this Diſeaſe, and fix'd on thoſe of Religion; and, inſtead of deſpairing of his Recovery, which is very natural in this Diſeaſe, he will deſpair of his everlaſting Happineſs, and the kind Promiſes of a better Life, that his Redeemer has made to every Chriſtian. So that this Deſpair does not ariſe from Religion, but is the Effect of theſe Cauſes that excite the natural melancholy Madneſs in the Habit.

Of the Cauſes of Lunacy.

THAT boiſterous, raging Madneſs or Lunacy, that diſcovers itſelf in the fierce Looks, furious Geſtures, and daring Actions of ſome Perſons, is the Effect of a Syſtem of Fibres greatly elaſtick, whereby all the Ideas of Objects are ſtruck on the Seat of the common Senſorium, with a ſtronger Impulſe.

Impulſe. Hence ariſe Ideas in the Mind, that are bold, daring, and raſh; Actions, in the Body, that are violently ſtrong, and above the ordinary Powers of the Conſtitution to perform. For in this Caſe the Heart and Arteries beat more forcibly, the Machinulæ of the Fibres that compoſe the Brain and Nerves, are ſtrongly purs'd up, and drawn almoſt into a convulſive State; ſo that all the fineſt Senſations are abated, ſometimes, to a Degree ſcarce able to create, in the Mind, an Attention to the neceſſary Cravings of Nature. CHAP. 12.

THAT great Strength, that often ſhews itſelf in both mad People, and the ſeverer Kinds of hiſterick Fits, is owing to a greater Contraction of the Machinulæ, that compoſe the Fibres of the Brain, Nerves and Muſcles, which generally continues in the latter till the Cauſe is ſpent; upon which the Fibres relax, and the Patient returns to her Senſes again. But the Fits of Madneſs continue a conſiderable Time longer, becauſe the Fibres of the Brain are more fix'd in their Motions, and conſequently incapable of diſlodging the Cauſes.

THEY perſpire little, urine leſs, and their Diſcharges by Stool are ſeldom, and little in Quantity, as under melancholy Madneſs; and, for the ſame Reaſon they will endure the ſevereſt Uſage, without diſcovering the leaſt Diſcouragement, or Senſe of Uneaſineſs; live without Sleep, endure Hunger, Cold, and the other Extremities of Pain, to a Time almoſt incredible.

AND thus we account for thoſe ſurprizing Relations or Hiſtories, that mention Perſons to have liv'd without Meat Drink, or Sleep, for forty or fifty Days or longer; for if the Machinulæ of the Solids are contracted above their natural Standard, and the Diſcharges by Perſpiration, Urine, and the other Evacuations of Nature, ſuppreſs'd, or greatly abated; it neceſſarily follows, that Perſons thus affected, will live a conſiderable Time longer without Food, and, indeed, without the natural Cravings of Nature, than thoſe in whom all theſe Diſcharges are free and unobſtructed; becauſe there will be fewer Demands for Suſtenance in them,

where

where ſo little is expended, in carrying on the Actions of the animal OEconomy. CHAP. 12.

Of the Cauſe of enthuſiaſtick Madneſs.

IF theſe mechanical Powers of the nervoſe Fibres happen to be too much contracted, in Perſons of a warm, bilioſe Conſtitution, elevated with a vain Conceit of Self-Holineſs, then every Impulſe that lodges any Idea ſtrongly on the Brain, or common Senſorium, ſhall be conceiv'd by them as a Meſſage from Above, as a Confirmation of their greater Sanctity, and conſequently of their greater Familiarity with their Maker. Then every ſtrong Impulſe made on the Brain, is a Warning to them, to undertake whatever their ſtrong Fancies ſhall ſuggeſt; for the Impulſe gives the Fancy, and the Strength of the Fancy is in Proportion to the Strength of the Impulſe; ſo that once a ſtrong Perſuaſion is ſtruck on the Fancy, that they are prophetically inſpir'd, they, immediately, take this ſtrong Perſuaſion for a Demonſtration, that they are choſen Saints, commiſſion'd to reform the unbelieving World; and, in conſequence of theſe ſtrong Perſuaſions, are hurry'd into all the extravagant Opinions

PART II. that their equally deluded Paſſions can lay hold on.

UPON this, they ſubmit their Faculties to be impos'd upon, from every Whim or Fancy, that ſtrongly ſettles it ſelf upon their Minds; and conclude, from the Uncommonneſs of the Impulſe, that their Whims and Fancies are divine Inſpirations of the Holy Spirit. This is the Origine of theſe enthuſiaſtick Rants, that ſome Perſons of a warm, bilioſe Conſtitution, and far gone in the Hypochondriack Melancholy, are incident to be affected with; and which admits not of any Cure, ſo readily as if you confine them to a Mad-Houſe, and oblige them to undergo the Diſcipline of the Place. This Treatment will ſooner recover them from this State of Lunacy, than the beſt Reaſons you can employ, which are generally loſt upon ſuch kind of People.

CHAP.

# CHAP. XIII.

## *Of the immediate Cauſe of* HYSTERICK FITS.

BUT, in many Caſes, the Spleen, Vapours, and Hypochondriack Melancholy, are not permitted to make this regular Progreſs, and terminate in Melancholy Madneſs or Lunacy; but their immediate Cauſes, at certain Periods, are flung off in a violent Manner by huge, convulſive Motions we call hiſterick Fits; and which ſhake the ſeveral Organs of the whole Animal Frame.

As the Ancients ſuppos'd, very erroneouſly, that Hypochondriack Melancholy aroſe in Men, from an Indiſpoſition of the Spleen; ſo were they of Opinion, that all theſe various Symptoms, that affect the Conſtitutions of weakly Women,

PART II. men, under the Vapours and Hyſterick Fits, are owing to a Retention of vicious Humours lodg'd in the Neck of the Womb.

Now, the Womb, under the Vapours and Hyſterick Fits, ſuffers no otherwiſe, but as there is a general Weakneſs in the Action of all the Animal Organs; and as the Stomach and Bowels are incapable of diſcharging their ſeveral Contents, ſo the Arterial Solids, miniſtring to the Laws of the Circulation, muſt neceſſarily abate of their Vigour, and conſequently the Womb itſelf be incapable of flinging off its monthly Purgations, thro' an Imbecility of the Uterine Veſſels; this muſt neceſſarily infer Obſtructions in divers of the Viſcera, but more eſpecially in the Stomach, Inteſtines, Liver, Spleen, Brain, and Nerves.

Now the Hyſterick Fit is a convulſive Motion, exerted from the mechanical Powers of the Nerves, inſerted in the ſeveral foregoing Organs, whereby they endeavour, through a mechanical Neceſſity, to reſolve the Obſtructions, to diſcharge

discharge that oppressive Load so disturbing to these several Parts, and recover the Animal Springs to their natural Tone and Elasticity again. 

How the Machinulæ of the Nerves are put upon those mechanical, convulsive Motions, in all Cases, where they suffer any Obstructions, Relaxations, or are let down beneath their natural Standard, I am now to discover: But, alas! this Subject opens to my View such a perplexing Scene of Nature, that it's with the utmost Difficulty I can discover any sure Footing on which to rest. The Hugeness of the Motions in some, the Painfulness of the Symptoms in others, and the Diversity of the Fits in all, are Points most difficult to handle. Here it is my Philosophy fails; beyond this I cannot go with Certainty; hitherto the Grounds were probable, but now the Lights darken, my Thought's bewilder'd, and I am got to the utmost Stretch of my Tether; what follows, therefore, in this Chapter is mostly conjectural, which if it happen not to please the Taste of the most judicious Reader, yet may it afford

The Difficulty of accounting for the Causes of Hysterick Fits.

afford ſome Hints, that may be of Service to thoſe, that attempt this Subject with greater Abilities.

FROM the beſt Obſervations I have been able to make, it appears, that the Brain is to the Nerves, what the Heart is to the Arteries; and as the Heart and Arteries are the Inſtruments of natural Heat and Motion, ſo the Brain and Nerves are the Springs that furniſh the ſeveral Organs with natural Strength, Senſation, and voluntary Motion: And as the former, from any Cauſes that may raiſe their Contractions above or beneath the Laws of Nature, will infer a greater or leſſer Degree of Heat and Motion, than is conſiſtent with the regular Standard of Health; ſo the latter, being exalted or depreſs'd in their Motions, will neceſſarily infer a greater or leſſer Degree of Strength, Senſation, and involuntary Motion, in the ſeveral Organs of the Body, than the Standard of Health requires they ſhould be.

ACCORDING to theſe Reaſonings, the Hyſterick Paroxyſms, will appear to have a very

a very near Relation with the Fits of Agues and intermittent Fevers; and I have myſelf known ſeveral Caſes, where the Fits of Vapours would attack the Patient at proper Intervals; and obſerve all their Stops, Stages, and Returns, as regularly as any intermittent Fever whatever, and to whom the Jeſuit's Bark prov'd the moſt Sovereign Remedy. 

GIVE me Leave to argue this perplexing Point a little more cloſely, ſince there ſeems to be ſo near a Relation between intermittent Fevers and the Hyſterick Paroxyſms. Now, we evidently perceive in intermittent Fevers, that the Blood ſtagnating in any of the minute Arteries, near the Surface of the Body, or indeed in the more internal Organs, will lay a greater Force upon thoſe that remain unobſtructed; upon which the Heart will receive a greater Quantity of Blood, than the Arteries would naturally charge upon this Organ, under a ſound State of Health: This larger Quantity of Blood, thus charg'd upon the Heart, neceſſarily obliges it to redouble its Force; for the Heart being a ſolitary Muſcle,

Muſcle, is capable of intending or remitting its Motions, accordingly as it meets with a greater or leſſer Reſiſtance, which impels the Fluids to the Surface of the Body with a greater or leſſer Impulſe, and conſequently diſcharges the obſtructing Corpuſcles by a free Breathing, that ſolves the Fit, and would the Diſeaſe, did not a Laxity of the Blood-Veſſels remain, and ſuffer the Fluids to run into the ſame preternatural Coheſions and Contacts, whereby the ſame Tragedy is repeated again, and often.

The Cauſe of that great Force and Strength in the ſtruggling Fits.

Now, to what ſo properly can we aſſign the Cauſes of that great Strength and Force, with which ſome weak Hyſterick Women exert their Arms, Legs, and whole Body in the Fits, but to thoſe Inſtruments of Strength the Nerves over-violently contracted? for the Strength of the nervoſe and muſcular Fibres, will always be increas'd or leſſen'd, in Proportion to the Number of Contacts that their Machinulæ touch at in all their Vibrations, and in Proportion to the Force with which theſe Impulſes are ſtruck: And as thoſe Paroxyſms of Vapours are excite

excited in the ſame Manner, and for the ſame Ends, as the Fits of Agues; that is, to reſolve the Obſtructions, and diſcharge the Body of a Load oppreſſive to Nature; it neceſſarily follows, that the firſt will demand a greater Strength and Motion, as the Obſtructions are principally lodg'd in the Inſtruments of Strength and Motion, that is, the Brain and Nerves; and the other a greater Heat and Motion, as the Cauſes are in the Inſtruments of Heat and Motion, that is, the Blood, Heart, and Arteries.



In this Action or convulſive Motion of the Animal Organs, the Machinulæ of every nervoſe Fibre, are always drawn over each other, and conſequently greatly beyond their * Spheres of Contact; which, upon their Receſſion, fall not directly into their proper Spaces, but are drawn down beneath their Spheres of Contact, in Proportion to their Elevation, according to the Nature of all ſpringy or elaſtick Bodies, that are let go under a State of Violence, that is, the Recourſes of the Machinulæ, are always anſwerable to their Courſes; or, to ſpeak according

Of the Workings of the Nerves in Hyſterick Diſeaſes

* Sphere of Contact ſignifies the proper Structure of the Machinulæ, whereby the nervoſe Fibres are enabled to perform natural Strength, natural Senſation, and voluntary Motion.

PART II. cording to the Language of the Mathematicians, concerning the Motion of a Pendulum drawn from the Center of its Oſcillation, that the Line it deſcribes by its Reflection, is ever equal to the Line of its Incidence.

IN the Fits of the Vapours, therefore, the nervoſe Syſtem is either fix'd in a continu'd Convulſion, as appears to be the Caſe under the Still Fits, and which ariſes from an over-violent Contraction of the nervoſe Fibrillæ, wherein all their Machinulæ are drawn over their Spheres of Contact, and remain ſo during the Time of the Paroxyſm, or are affected with divers Spaſms, Tremors, and involuntary Motions, wherein the ſeveral Organs are cruelly agitated and convuls'd.

IN theſe huge convulſive Motions attending theſe Scenes of Horror, the Machinulæ let go theſe Contacts, in which they ſtand during the Convulſion in the ſtill Fits, and are violently affected with divers Motions to and from each other, which excite a much ſtronger, and more powerful Motion in the Fibres, and conſequently

in

in the ſeveral Organs and Muſcles of the Body, in Proportion to the Force of the Cauſes. CHAP. 13.

IN many hyſterick Women, where the Fits are more ſtill, there are unuſual Motions in the Bowels, great Swellings in the Hypochonders, and a Heaving from the lower Parts of the Belly, as if ſomething was inwardly aſcending to the ſuperior Organs: Theſe Symptoms proceed altogether from Wind, which is driven into the Upper Parts, by the mere Force of the Fibres, during their convulſive Motions.

Of different Sounds excited from Wind pent up in the Cavities of the Bowels.

SOMETIMES it deſcends, and getting into the Bowels, variouſly modulates the inteſtinal Tubes: Hence ariſe thoſe ſtrange, and ſurprizing Sounds, with which cunning and deſigning Men have impos'd upon the Vulgar, as if the Patient was poſſeſſed, or under the Influence of an Evil Tongue; for the Inteſtines being hollow Tubes, and capable of divers Corrugations, emit different Kinds of Sounds, according to the different Mechaniſm they receive from the different Straightning of their Cavities.

AND its wonderful to conceive, what Variety of ſtrange Sounds, the Guts often ſurprize us with, eſpecially, if, in Hypochondriack Perſons, theſe Inteſtinal Tubes happen, through the Workings of the Fibres, to receive a Modulation in Figure not unlike the Cavity of the Epiglotis. What Barking, Yelping, Croaking, and Caterwauling Conflicts are often emitted from the Bowels, as their Cavities are differently diſpos'd to receive the Impulſe? For it is nothing but the Convulſions corrugating the Fibres, and differently impelling the Air, through Cavities of different Figures, that excites all that Uproar and Confuſion, many People complain of, that labour under this troubleſome Symptom of Wind. Sometimes it is driven to the Throat, where conſtringing the Nerves of the Wind-Pipe, it threatens the Patient with a Senſe of Suffocation. This Conſtriction ariſes from a Convulſion, and that Convulſion from the *Machinulæ* of the Fibres conſtituting the Wind-Pipe being too much contracted.

SOME People, under ſtrong Fits, loſe the Uſe of all their Senſes: This happens when

when the nervous Fibres are contracted so far above their natural Standard, that the several Organs are thereby render'd incapable of receiving the Impression of Objects, or conveying them to the Seat of the common Sensorium This is the Case generally, both under the still Fits, and those that are attended with huge Strugglings.

AND as there are two Extremes of Motion in the Animal Fibres, wherein all the Ideas of Sensation are greatly abated, and sometimes entirely lost : So is there a third Extreme, where the Idea of Pain, and, consequently, Sensation is greatly increas'd. To this Origin we may reduce those shooting Pains of the Head, those severe, racking, cholick Pains, that affect some hysterick Women with Tortures, almost above the Bearance of human Nature.

IN these Cases, the *Machinulæ* of the Nerves are too much contracted from stimulating Objects, that put too great a Tension or Rigidity upon the Fibres, that compose the several Organs : Upon which the

PART II. Object of Pain is ſtruck upon the Mind with greater Vehemence; ſo that, in Relation to theſe Pains, we are to conſider the Matter, Tenſion, Senſation, and Perception; for it is the Matter obſtructing in any Part, that excites the Tenſion, the Tenſion of the Fibres, the Senſation, and the Senſation the Perception of Pain, whereby its different Degrees are convey'd to the Mind or Seat of the common Senſorium.

THUS far of the ſeveral Requiſites neceſſary for knowing the Nature of theſe Diſorders, the Symptoms attending, and their ſeveral Cauſes: It now remains, that I go on to diſcover the moſt proper Rules of Practice, in order to finiſh a compleat Syſtem of the Spleen, Vapours, and Hypochondriack Melancholly.

*The End of the Second Part.*

# A NEW SYSTEM OF THE SPLEEN, VAPOURS, AND *Hypochondriack* MELANCHOLY.

## PART III.

### CHAP. I.

*Of the Certainty of Practical Principles, and their Application.*

I HAVE, in the Firſt Part of this Treatiſe, endeavour'd to prove that there is a ſupreme intellectual Principle, or Soul, in every

PART III. Individual; that this ſupreme, intellectual Principle is an immaterial Subſtance, or Being, that ſupports the different Faculties of the Underſtanding, Reaſon, Will, and the Memory: That the Exerciſe of theſe ſeveral Faculties depends on the Laws of Matter and Motion, that is, demand the Aſſiſtance of corporeal Organs, to make their Senſations and Reflections be regularly perceived.

IN the Second Part, I have endeavoured to demonſtrate, how, from divers Cauſes, theſe corporeal Organs may neceſſarily be diſconcerted, in order to produce irregular Motions, irregular Senſations, and irregular Perceptions, in the Mind; from whence ariſe a wrong Turn of Thought and Judgment, under the Spleen, Vapours, and Hypochondriack Melancholy.

I SHALL, therefore, in this Third Part, attempt to diſcover the Nature of theſe Practical Principles, and the Certainty of their Application, in order to reſtore the Conſtitution, labouring under the

the ſeveral foregoing Diſeaſes, to its regular Standard of Health: For it little avails us, that the Cauſes and Symptoms of Diſeaſes ariſe from the irregular Motions of the Solids and Fluids; if, at the ſame Time, we can't diſcover certain Practical Principles, that may aſſiſt us in the Application of proper Remedies, neceſſary to reduce thoſe irregular Motions, within the Boundaries of Nature's Laws again.

Of the Certainty of Theory.

Now, as the Certainty of Theory conſiſts in the intuitive View, that all the Senſes have of the Symptoms, from thoſe external, obvious, ſenſible Qualities, that always under a Diſeaſe afflict the Habit, and vary with the Symptoms; and from a rational Knowledge of theſe internal, irregular Motions, that diſconcert the ſeveral Organs, and excite the foregoing Phænomena: So, it follows, that, in order to cure a Diſeaſe, we muſt endeavour to increaſe or leſſen theſe internal, irregular Motions, according as they ſhall be defective, or abound: So it follows, that, in order to increaſe or leſſen theſe internal, irregular

PART III. Motions, we muſt attempt to intend or remit the Actions of the Solids, and Fluids, in ſuch a Manner, that the defective Qualities may prevail, and the abounding Humours paſs off by ſome of the natural Diſcharges, which will prove the Cure of the Diſeaſe.

Of the Certainty of Practical Principles.

THE Rectitude of practical Principles, therefore, is the Conſequence of a rational Theory, ſupported upon the moſt evident Maxims of Truth: And as the latter diſcovers to us theſe irregular Motions, that excite the various Phænomena of Diſeaſes; ſo the former directs us how to intend or remit the Motions of the Solids and Fluids, ſo as that they may move within the Sphere of their regular Standard.

THE Reaſon, as I humbly apprehend, why the Spleen, Vapours, and ſeveral other chronick Diſeaſes, are ſo difficult of cure, is, becauſe we too often apply to the wrong Powers: We endeavour to thicken, or thin, the Blood, and other Juices, when, at the ſame Time, we neglect to reſtore the Solids, on whoſe

Motions,

Motions, not only the well-being of the Blood, but all the other Juices ſecreted in the Animal Oeconomy, have their principal Dependence: And this I take to be the real Cauſe of thoſe frequent Returns of moſt chronick Diſeaſes: For after we have reduc'd the Juices to as regular a Conſiſtence, as their natural State and Condition may require, for a free Circulation; yet if a Languor remain upon the Solids, they will be unable to preſerve the Fluids from unfriendly Coheſions; upon which, they will raiſe the ſame Tumult, as before, that is, there will be a Relapſe, or the Diſeaſe will return.

BESIDES, yet, further, to prove the Precariouſneſs of grounding any Hypotheſis upon Calculations, that concern the different Qualities and Motions of the Fluids, or from Medicines, that, we know experimentally, have a Power to thicken or thin the Blood; I have, in my *New Method of Treating Conſumptions*, demonſtrated, that ſeveral Medicines will fuſe the Blood in the Poringer, that will thicken it, while it remains

PART III. remains within the Laws of its Circulation, and *vice versa*.

So that when we say such and such a Disease is difficult of Cure, what is this, but to say, that we are ignorant of the Laws of Nature, by which she excites such Phænomena in the Constitution, and, consequently, of the Indications most proper to be employ'd, in order to attain a successful Cure?

They that object against the Certainty of Practical Principles, seem not very well to understand the Question in Debate.

I KNOW there are many, that, with great seeming Force, will object against the Certainty of practical Principles: What, say they, do we not daily perceive the Uncertainty of Practice, from the numberless Diseases that continue incurable? Are we not certain, from Experience, that the same Medicines that cur'd a Disease in one Person, shall fail of Success, if apply'd to the same Disease in another? Nay, that the same Medicines, that reliev'd the Patient, and gave a wonderful Turn to the Disease, at one Time, shall fail of Success, if apply'd to the same Disease, upon a Relapse? Which certainly demonstrates the

Preca-

Precariouſneſs of all practical Principles ever yet try'd, and of all medicinal Applications ever yet grounded upon thoſe practical Principles. CHAP. I.

To all which, give me Leave to anſwer, that it is impoſſible in the Nature of Things, but that the ſame Effects will always ariſe from the ſame Cauſes, acting in the ſame given Circumſtances: And that conſequently the ſame Effects, that is, the ſame Diſeaſe will always be removeable from the ſame Adminiſtrations or Applications of Remedies, acting in the ſame given Circumſtances.

The ſame Cauſes always produce the ſame Effects in the ſame given Circumſtances, and the ſame Effects, that is, the ſame Diſeaſes, are always removeable from the ſame Applications acting in the ſame given Circumſtances.

IT would be confounding all the Laws of Nature, and Certainty, by which we judge of the Truth of ſuch Laws, to aſſert, that Medicines, in their Operations, are not conſtant, ſteady, and regular; and much the ſame, as to ſay, that the ſame Cauſes do not produce the ſame Effects, in the ſame given Circumſtances, which is contrary to Experiments, Matters of Fact, and the Teſtimony of all Men endued with the noble Principle of Reaſon: And, therefore,

if

PART III. if at any Time an Application be made to a Diſeaſe, that does not relieve it, which did relieve it before, it is a ſure Indication, that the Symptoms of that Diſeaſe vary now, from what they were before.

IN the Cure of Diſeaſes, we ought, above all other Things, to conſider, that their Symptoms vary mightily every Moment of Time, and conſequently are not, when they return upon Relapſes, what they were in the original Diſeaſe; for, generally, they have had a conſiderable longer Time to rivet on a weakly Conſtitution, and vary the Motions of the Solids and Fluids; and, therefore, will demand a conſiderable greater Time, in order to reſolve the Obſtructions, and give a Freedom to the Action of the Organs embarraſs'd, thro' the Violence of theſe irregular Motions.

THE only material Point that remains to be conſider'd, in order to aſcertain a ſucceſsful Practice, is, to diſcover ſome Criterion whereby we may certainly judge of the particular Conſtitution of the

the Patient; for when once we have discover'd a Set of proper Remedies, and certain practical Principles to ground their Operations upon; we shall easily judge of the proper Circumstances of their Application, if we can but discover the particular Constitution, that, at that Time, predominates in the Patient's Habit.

Now we certainly shall discover all the different Constitutions that come under our Inspection, from the hottest to the coldest, from the driest to the moistest, from the different Beating of the Pulse, from the different Motions of the Solids and Fluids, and from the several external, obvious, sensible Qualities, depending on these Motions, as they are higher or lower, swifter or slower; and of which I have copiously enlarg'd in the first Chapter of the second Part of this Discourse.

THIS is then all, that we know of these Matters, and this is all that we need desire to know, in order to attain the highest Certainty in the Application of these practical Principles: For we have

PART III. have but a very imperfect Idea of the firſt conſtituent Figures of Matter; the Cauſes of Diſeaſes depending on the Bulks of Corpuſcles, greatly remov'd from thoſe ultimate Diviſions, that conſtitute their primogenial Simularity, and are rather owing to their different Coheſions, Magnitudes, and Motions, than their Figures.

I KNOW ſome underſtand by the Certainty of Practice, a Power in Medicine, of curing all Diſeaſes, in all Ages, Sexes, and Conſtitutions; but by the Certainty of Method, or the certain Application of theſe practical Principles, I only conceive a Power in Medicine, capable of relieving the Conſtitution, as far as it is relievable, from certain Indications, under certain given Circumſtances.

THESE certain given Circumſtances are diſcoverable from ſeveral concurring Marks, Tokens, and Symptoms, that indicate the Syſtem of the Solids and Fluids, not incapable of a Reſtauration; which is only to be effected by preſcribing the ſeveral Doſes of the Medicines anſwer-

anſwerable to the removing the Quantity of Matter cauſing the Diſeaſe: But here a Queſtion very naturally recurs, and that is, How ſhall we judge of the Quantity of Matter, and the Force of Medicines neceſſary to be employ'd in order to unlock the Obſtructions? And that will appear very clear in the Spleen, from the Oppreſſion of thoſe particular Organs, that labour under the Diſeaſe; and from the ſeveral viſible Circumſtances, that neceſſarily attend that Oppreſſion.

How to judge of the Quantity of Matter, and the Force, neceſſary to unlock the Obſtructions.

To explain theſe curative Indications in the cleareſt Manner, we are to conſider, that under the Spleen, the whole nervous Syſtem is let down beneath the Standard of Nature, through a Defect of animal Fluids, and the animal Fluids are defective, becauſe the Glands of the Brain are too much relax'd, whereby the Secretions of the animal Fluids are leſſen'd; and the Secretions of the animal Fluids are diminiſh'd, becauſe the Syſtole of the Brain is impair'd, and the Syſtole of the Brain is impair'd, from an Abatement of Elaſticity in the Impulſes of the arterial Solids; and the Contractions

PART III. tractions of the Arteries are weaken'd from the impair'd Force of the Heart; and the Heart we diſcover to be impair'd in its Action, from the languid Beating of the Pulſe: So that when once we have made a Diſcovery of the ſeveral Inſtruments affected, from a Chain of Conſequences ſupported upon the cleareſt Reaſonings, we have nothing more to do, but to apply a Force capable of reſtoring the Motions of theſe ſeveral foregoing Organs; in which Caſe, their ſeveral Impulſes, Secretions, Senſations and Perceptions, will be reſtored to their regular Standard again.

THE only Point I can perceive that remains undiſcover'd, is, how we ſhall be able to judge of the particular Force neceſſary to be employ'd in any particular Diſeaſe. This Point, I muſt confeſs, can be reſolv'd upon no other Grounds, than by putting the particular Caſe; for the Symptoms generally indicate the Intenſeneſs of the Diſeaſe, and the Intenſeneſs of the Diſeaſe, the particular Force neceſſary to be employ'd in its Cure.

IF, indeed, the Obſtructions are either ſo faſt wedg'd upon the Habit, as not to give way to the neceſſary Impulſe; or if the Conſtitution, at the ſame Time, is ſo weakly reduc'd, as to be incapable of bearing the Force neceſſary to reſolve the obſtructing Matter, then it follows, that both theſe Caſes will come under the Denomination of incurable Diſeaſes, and do not at all affect either the Certainty of practical Principles, or their Application.

How this Manner of Reaſoning will be reliſh'd by thoſe, that declare it impoſſible to diſcover Certainty, any further than they can diſcover Ideas, I know not: But as the various Phænomena, Changes, and Effects, of human Bodies, are attended with certain Motions; and as theſe Motions are diſcoverable from certain, ſenſible, obvious Qualities, that come under the Inſpection of our Senſes; ſo it appears, in the cleareſt Manner evident, that theſe inviſible Motions, by the foregoing Chain of Reaſonings, are brought under a direct and immediate View of the Mind, by conſidering them cloſely

PART III. connected, with these external, sensible, evident Qualities; for the Certainty of our Ideas, and their Connexion immediately perceiv'd, depends on Intuition: The Certainty of our Ideas, and their Connexion, not immediately perceived, but only by Ideas going before, and coming after, on Reflection, supported upon the clearest Reasonings. And tho' the Certainty of the latter may not be self-evident to the Senses, as in the former Case; yet I see not, why, in a physical Sense, it should not amount to certain Knowledge, which is the Self-evidence of the Mind, and all the Evidence it can have of Propositions, that come not within the immediate View of the Senses.

To conclude: Give me Leave to observe, that it's impossible for the Wit of Man to conceive any Idea of a Disease, but what must arise from either a too great Contraction or Relaxation of the *Machinulæ* of the Fibres; whether that Indisposition is nervous, chronick, or of an acute Nature. That, in all Cases of Diseases, there are certain inseparable Symptoms,

Symptoms, that clearly indicate whether the Fibres of the ſeveral Organs are under a State of too great Contraction or Relaxation, which, with the greateſt Certainty, points out the moſt proper Methods, in order to reſtore theſe diſaffected Organs. 

OF all theſe particular Indications, the Mind has an intuitive View, and can look as far into their abſtruſe, myſterious Natures, as is neceſſary to enable the Phyſician to act upon the moſt ſteady, certain, and undoubted Principles. And this, more eſpecially, holds good, if the Chain of Ideas that ſupports the Theory and Practice be clearly connected, and no Links left out, that may render the Demonſtration incompleat.

## CHAP. II.

### *Of the Laws and Regulations to be obſerved, in relation to the Air, Diet, and Exerciſe.*

BUT in vain have we attempted to diſcover the Certainty of practical Principles: In vain is the Adminiſtration of the choiceſt Remedies upon theſe certain practical Principles, unleſs the Patient is firm in his Reſolutions of living conformable to certain Rules, that may aſſiſt his Conſtitution to overcome thoſe noxious Humours, that are ſwill'd into the Habit, from a vicious and irregular Way of living: For it will be impoſſible to make any conſiderable Advances in the Cure of this Diſeaſe, unleſs he reſolves, in the firſt Place, to abridge the Quantity of his Food, and change thoſe rich, poignant Sauces, and hot, ſpicy Ragoos, for a plain, ſimple, innocent Diet upon white Meats, and ſuch as may aſſiſt the Reſtoration of the nervous Solids, without laying

laying any great Streſs upon the Di- CHAP. 2.
geſtions.

THE Beneſits that ariſe from an Abridgment of our Diet, in this Diſeaſe, are very conſiderable; for by this Means we ſhall quickly lower the Impulſes of the Solids, the Motions of the Blood and Humours, the Secretion of the Spirits, and that Quantity of Force with which the Nerves ſtrike the common Senſorium; and, conſequently, prevent thoſe active Senſations, from making too brisk Efforts upon the Mind, through the prevailing Influence of the Paſſions.

All cuſtomary Habits extremely difficult to leave; and why.

Now, although Experience confirms, that all cuſtomary Habits are extremely difficult to overcome; yet the bilioſe, of all others, demands the greateſt Reſiſtance from the Mind; becauſe, under this Conſtitution, the Impulſes are ſtruck on the Seat of the common Senſorium, from all affecting Objects, with the greateſt Senſibility, which irreſiſtibly excites this noble, thinking Power, to demand the more frequent Returns of freſh Supplies, to ſatisfy its Cravings: Theſe

PART III. continual Gluts, muſt, in Time, impair the nobleſt Organs, vitiate the Mind, and enervate the ſeveral nervous Springs of the whole Animal OEconomy. And this is the Reaſon, why the moſt ingenious Natures, are ſo incident to be affected with the Spleen, eſpecially, if their Circumſtances will allow them a general Indulgence in all the luxurious Pleaſures of Life.

THO', in regulating the Patient's Diet, under moſt other chronick Diſeaſes, attenuating Aliments be preferable to all others, yet a greater Latitude and Indulgence muſt be granted towards ſplenitick People, becauſe their Paſſions are ſtrong, and leaſt able to bear a Change from that Diet, they have been naturally accuſtomed to. However, as little fleſh Meats as poſſible, and theſe dreſs'd in the plaineſt Manner, will be moſt available in the Cure of this Diſeaſe.

Of Diet. AND as the Spleen proceeds from a Decay of the nervous Fibres, as Conſumptions do from a Waſte of the muſcular, fleſhy Fibres; ſo I think, that a Diet upon Vegetables, and the lighter Animals,

Animals, that is, ſuch as contain the leaſt Blood, is preferable in this Diſeaſe, to all others. To this End and Purpoſe, beſt agree, Oyſters, Crawfiſh, Chocolate, and Jelly of Calves-Feet, new-laid Eggs, Chickens, Chicken Broath, little Birds, *&c.* The Viper Broath and Viper Wine, I account as Remedies inferior to none in nouriſhing the Nerves. CHAP. 2.

MILK is nought for ſplenitick Conſtitutions, unleſs the Habit be highly bilioſe; for, from the Sharpneſs of the Juices, it is apt to curdle on the Stomach, and generate cholick Pains, and other Symptoms extremely diſturbing to Nature; however, the Aſs's Milk, in ſome Conſtitutions, will prove a very friendly Nouriſhment.

WHATEVER be the Patient's Food, he ought to eat little at Times, and often; and if he perceives the Wind greatly to diſturb him after Meals, he ought to take ſome peptick Powders, to aſſiſt his Digeſtion; and, in the mean Time, let him ſit a while before he goes upon his

PART III. Exercise, lest a too speedy Motion, upon a full Stomach, should excite that Organ to fling off the Meats before they are well digested.

Of Drink. HIS constant Drink, employ'd in the Office of Digestion, should be either small Beer, or fine soft Ale, if he be of a bilious Constitution; or Wine and Water, if inclinable to generate Phlegm. Under these latter Circumstances, he may indulge a little more freely in a Glass of generous Wine; the plain *French* Wines are best, of all others, if moderately us'd, in all Cases of the Spleen, Vapours, and hypochondriack Melancholy.

Of Drams. BUT, above all, he ought to be highly careful never to habituate himself to Drams; for they certainly prove fatal to all Persons that indulge themselves in their extravagant Use. By their great Heat, they crisp up the Fibres, impair the natural Contraction of the Solids, the natural Motion of the Fluids, depending on these Contractions, and consequently the natural Heat. I have my

self,

ſelf, known ſeveral, that, from the moſt hale, ſtrong, robuſt Conſtitutions, have been reduc'd to a feeble, weakly, enervated Habit, through their immoderate Uſe.

INSTEAD of raiſing, they depreſs, the Spirits, and are but Cheats, that give a momentary Relief: Like Gunpowder, they raiſe a ſudden Blaze, that is ſoon extinguiſh'd, and generally follow'd with a ſucceeding Gloom. They therefore ought to be avoided as you wou'd Death itſelf, to which they ſeldom fail to pave the Way, if Care be not timely taken to prevent their fatal Effects.

Of the Benefits of the Air.

I SHOULD, indeed, according to the Order of the Nonnaturals, have treated of the Benefits of the Air, before that of Diet; but as it is impoſſible that this Element can ever diſconcert the animal Motions, unleſs the Conſtitution be firſt impair'd, from a vicious Method of Diet; ſo I thought it moſt agreeable to the Laws of Nature, to treat of the Cauſes that generate the Diſeaſe, before thoſe that only excite the Symptoms; for the Air

PART III. Air is ſeldom or never concerned in generating the Spleen; it only excites a Fit, by putting thoſe Cauſes in Motion, that, before, had an Exiſtence in the Body.

The Air never concern'd in generating the Spleen, but only in exciting a Fit from Cauſes already generated in the Body of ſplenitick People.

THIS appears moſt conſpicuouſly clear, in thoſe that are ſubject to vary the Exerciſe of their intellectual Faculties, according to the different Point from whence the Wind blows: Theſe weather-glaſs Conſtitutions, ſhall be more exact in diſcovering the immediate Changes of the Atmoſphere, from the different Elevation or Depreſſion of their Spirits, than the moſt exact Barometer you ſhall meet with.

Now, as the *Machinulæ* of the Fibres, through the whole Conſtitution of the Solids, are relax'd, and let down beneath the Standard of Nature; ſo it follows, that a fine, light, open Air, moderately cold, and free from high Hills, great Mountains, or lofty Woods, that may interrupt its fine Breezes, and take off from its Spring, is moſt proper to brace, reſtore, and wind up thoſe impair'd Springs of Life to their primitive

Con-

Condition again; and if the Soil be rather ſlopingly riſing, ſo much the better; and thoſe Situations are always preferable to live near, where the Soil naturally produces Plenty of pleaſant Flowers, whoſe fragrant Corpuſcles the Air will not fail to attract, and convey in pleaſing Senſations to the Brain, and Faculties of the Senſes. For theſe Reaſons, I hold *Hampſtead*, *Highgate*, and *Blackheath*, preferable to all other Places near this great Metropolis; becauſe the Air in theſe Places, is thin, ſubtile, clear, and much impregnated with nitrous Corpuſcles, that will add a Stimulus to the Conſtitution, increaſe the Secretions, reſolve the Obſtructions, and, conſequently, give a Freedom to the Circulation: Not, but that the Patient may equally reap the Benefits of this Element, in other Places, where good Company abounds; which is a principal Point always to be had under Conſideration.

Of the Benefits of Exerciſe.

IN treating of the Benefits that ariſe to the Conſtitution from Exerciſe, I ſhall ſpeak of it under a two-fold Conſideration; Firſt, As it reſtores the contractile

PART III. tractile Force of the Solids, greatly impair'd under the Violence of this Diſeaſe. Secondly, As it aſſiſts the Mind to overcome thoſe deſpairing Ideas that depreſs the Exerciſe of its Faculties.

It's impoſſible to conceive the Benefits that ariſe to the Conſtitution from Exerciſe, either on Horſeback, or in a light open Chaiſe; the former reſolves the Obſtructions of the Stomach, enlarges the Secretions of the Viſcera, and reſtores the Texture of the Solids, whereby it renders thoſe Corpuſcles capable of paſſing Strainers, which they could not paſs before, unaſſiſted with this Motion. Beſides, Riding is an Exerciſe that puts the ſeveral Parts of the Body to the leaſt Streſs; for while we are on Horſeback, or in an open Chaiſe, we cannot be ſaid ſo well to exerciſe, as to be exercis'd; for the Man, to all Intents and Purpoſes of labouring, is paſſive, and the Horſe exerciſes or works him; ſo that the Benefits of this Motion is equally apply'd to all Parts of the Body, without the leaſt Reſiſtance from himſelf: And this Exerciſe may be ſo varied, intended, or remitted,

remitted, as to give Relief to all Ages, Constitutions, and Degrees of the Spleen, which is more than can be said of any one Remedy besides, in the whole Republick of Physick; for he may keep his Horse to what Pace he pleases; and, if a Trot be too jolting, he may put him to a Hand-gallop, may amble, pace, or walk him. 

And, indeed, I have my self, under a dangerous Decay, attended with several splenitick Symptoms, receiv'd so much Advantage from this Exercise, that I cannot, but in the most earnest Manner, recommend it to all that perceive their Constitutions begin to give way.

I know it is very difficult to persuade some People that so much Benefit can accrue to the Constitution from Riding; but this Incredulity arises from their not considering the great Dependence that the Structure and Mechanism of the Solids have on external, foreign Motions. They that are desirous of further Observations on this Subject, may consult my *New Method of treating Consumptions*,

PART III. where I have particularly demonſtrated, that the reſtitutive Force of all animal Fibres, is greater than their diſtractive Powers, upon the Application of Motion.

Of the Benefit of Exerciſe to the Mind.

BUT not only to the Body is the Exerciſe of Riding thus advantageous, but the Mind alſo greatly partakes of the Benefit. This intellectual Principle, under the Spleen, is faſt chain'd down to a particular Way of Thinking: All its Ideas are dark, gloomy, and dejecting; which depreſs our Thoughts, and keep them too long attentive to the ſame Objects. Now Riding takes the Mind off from that too long and anxious Attention to the ſame Ideas, by ſoliciting our Senſes with different Objects, that ariſe from the various Scenes of Nature, through which we paſs; and which muſt enlarge our Thoughts, and conſequently make them leſs attentive to thoſe particular Views, to which before they were habituated during their State of Inaction.

WE perceive, that Men long inur'd to Buſineſs, if they ſuddenly fling it up, readily

readily fall into the Spleen, through a want of proper Objects to keep up the Mind's Attention. This so certainly happens, and Men of great Dealings are so sensible of it, that they will rather choose to undergo any Fatigue or Drudgery in Life, than entirely quit their Occupation; for the Mind can no more be unemploy'd for any considerable Time, without suffering a Change, than the Body can intermit Exercise, and continue in Health.

AND, for this Reason, we perceive, that they that sleep much, seldom discover any great Abilities in the intellectual Faculties; because these overlong Interruptions with Self, so weaken the Springs of the finest, animal Fibres, on which the Exercise of those Faculties depend, that their Play and Action are thereby greatly obstructed. So that he that would live in a Freedom from the Spleen, must be exactly careful of his Diet, of his Exercise, and of his Pleasures; which will be the only Way to keep the Balance of the Constitution even, and the Passions regular in their Motions.

CHAP.

## CHAP. III.

### *Of the Government of the Paſſions under the Spleen and Vapours.*

HAPPINESS and Miſery are the Shades and Lights, that ſo much diverſify the different Scenes of Life; and as theſe have a very great Dependence on our Paſſions, ſo it will appear how much it concerns us, to regulate their Motions, and keep them ſubſervient to the Command of Reaſon.

THE Paſſions never exceed our reaſonable Appetites, till the intellectual Principle, or Soul, ſubject the Government of the Body to the Guidance of the Senſes; that is, till it give into all the extravagant Deſires that ariſe from the irregular Impulſes of their Organs: So that where Reaſon ſhould govern, the ſenſual or exorbitant Paſſions govern, and captivate the Underſtanding to their Will.

As,

As, therefore, our Happineſs or Miſery of Life ariſes from a Mixture of Good and Evil, which the divine Author of our Being has made inſeparable to the very Frame and Conſtitution of our Natures; ſo it follows, that the Degrees of each are to be eſtimated from the Preſence or Abſence of theſe oppoſite Characters we call Pleaſure and Pain; and the Length of Time either of theſe Affections are preſent or abſent to the Body, which gives us the livelieſt Idea of Happineſs or Miſery. This is the cleareſt Way of computing the Degrees of our Pleaſures or Pains; and diſcovering on which Side the Balance lies. CHAP. 3.

I AM ſenſible that all Mankind deſire Happineſs, but the Misfortune is, that they are reſolv'd to have it in a Way that is impoſſible to our Natures; that is, all neat without the leaſt Alloy, and, which were it poſſible, muſt in Time neceſſarily turn to Miſery: For were our Lives one continual Scene of Good, or a continual Succeſſion of pleaſureable Ideas, that Good, theſe Pleaſures, would ſoon grow inſipid and taſteleſs; and ceaſe to charm

PART III. us with their fine, agreeable Reliſh, for want of the Objects of Evil to refer them to: For Good is a relative Term, which is impoſſible to be underſtood, but as it is referr'd to ſome Object inferior to it in Goodneſs, or at leaſt to us in certain Circumſtances of Happineſs.

No Poſſibility of abſolute Happineſs in this Life.

LET any Man imagine to himſelf the moſt advantageous Scenes his own Heart can wiſh, yet, upon Poſſeſſion, he will find himſelf as far from being entirely happy, as he was before their Acquiſition; nay, it will be Odds, if he be not attended with greater and more inſupportable Woe and Unhappineſs upon their Enjoyment. Theſe little Ills of Life, or thoſe ſlight Afflictions, incident to affect the braveſt Souls, ſet off their ſucceeding Pleaſures with the greater Reliſh, and render their Joys more exquiſitely compleat, in the ſame Manner as Diſcords rightly plac'd in Muſick, raiſe the Harmony of the Concords, and preſent to the Mind a moſt beautiful Contraſt of different Sounds. And I have obſerved Intervals my ſelf, when not the leaſt

leaſt Breath of Air has blown croſs upon my Affairs, not the leaſt Shade overcaſt this Sun-ſhine; that, under this favourable Gale, internal Motions would ſpring up in the Mind, generating Paſſions, that wou'd jar, quarrel, and ſadden this moſt pleaſing Proſpect.

THAT Man may certainly be ſaid to be happy, whoſe Number and Degrees of Pleaſures exceed his Number and Degrees of Pain; and were I to chalk out a Life attended with the moſt pleaſing Scenes, that mortal Man is capable of enjoying, I would fix the Zenith of his Happineſs in a State, that ſhould give him five or ſix Degrees of Pleaſure for one of Pain, through all the ſucceeding Periods of Life: And that Man would have little Reaſon to quarrel with the Structure, Mechaniſm, and Make of his Conſtitution, for not being more abſolutely free from the Uneaſineſſes of Life; ſince theſe little Inequalities would be neceſſary to give a Reliſh and Uniformity even to the fineſt Pleaſures themſelves.

Some Degrees of Uneaſineſs neceſſary to render the Pleaſures of Life more affecting.

PART III. Now if we grant a longer Period to our Satisfactions, than five or six to one, our very Joys would pall upon the Senſe, and change their pleaſing Affections into ſome Degree of Pain or Uneaſineſs. If the Pains, or theſe gloomy Scenes of Nature, were longer in their Periods than what we have here given, then they would too much diſconcert the Pleaſures themſelves, that is, render the Objects leſs affecting.

AND this Calculation of Pleaſures and Pains, or of the Goods and Evils of Life, I look upon to be the exacteſt Medium, in order to render our Being compleatly happy, and which very few enjoy: For I do not remember, that among all the Numbers of my Acquaintance, I ever convers'd with one upon theſe Points, that his Satisfactions and Pleaſures did ſcarce over-balance his Diſappointments, Miſeries, and Afflictions; tho' his Affairs were under the beſt Management, and his Circumſtances in the moſt flouriſhing Condition. So that it is not the external Pomp and Affluence of Fortune, but the inward Peace and Contentment of the Mind, that muſt render the

the Individual compleatly happy, if ever he expects to enjoy the Bleſſings of a peaceable and perfect Tranquillity. CHAP. 3.

WHAT the Stoicks meant by their *Summum Bonum*, I am not able to conceive; unleſs it was a pleaſurable Life, abſtracted from all Evil; which is a State rather to be deſir'd than enjoy'd, and which is impoſſible, in the Nature of Things, on this Side Immortality.

FROM the foregoing Reaſonings on this Subject, it clearly appears, that moſt of our Miſeries are of our own making; and generally ariſe from the Paſſions greatly elevated above their natural Standard.

THE Cauſe of theſe Elevations, or exorbitant Riſings of the Paſſions, is owing to the exorbitant Impulſes with which the ſenſible Fibres ſtrike the Seat of the common Senſorium, whereby the Inclinations are ſtrongly impell'd to divers Objects, often very unſuitable to our State and Condition.

PART III. THE Cauſe of theſe violent Impulſes ariſes from an irregular Manner of Living, highly contrary to the Laws of the Conſtitution; and which inflame the Blood, fire the Paſſions, and put all Nature into a Ferment.

So that the firſt Step, towards lowering the Paſſions, Inclinations, and irregular Appetites, is to abate of our Diet, which will lower the Blood's Motion, retard the Secretion of the Spirits, and conſequently leſſen the Impulſes that the Nerves make upon the common Senſorium.

UPON Things being thus conducted in the Animal OEconomy, all the Faculties will ſupport their proper Action, the Motion of the Paſſions will be ſubordinate to the Motions of the Underſtanding; and the Mind it ſelf ſteady, ſerene, and calm, in the moſt important Scenes of Life: And in this Tranquility conſiſts the true Happineſs of human Life, as far as it is attainable in this imperfect State of Nature.

To conclude, If we would live free from the Spleen and Vapours, we ought to ſubject the Conduct of the Paſſions to the ſovereign Power of the Underſtanding; and never too anxiouſly purſue Objects that may give us too great Pain and Uneaſineſs, or that are out of our Reach to attain. 

## CHAP. IV.

*Of the Powers of Muſick in ſoothing the Paſſions, and allaying the Tempeſts of the Soul, under the Spleen, Vapours, and Hypochondriack Melancholy.*

IN the Firſt Part of this Treatiſe I lay it down as a fundamental Principle, that there is a Connexion between certain Motions of the Mind, we call Paſſions, and certain Motions of the Fibres of the Brain, that ſupport theſe Paſſions; and that both are capable of being varied, exalted, or depreſs'd, accordingly

PART III. ingly as the Force of musical Sounds differently influence their Motions.

IN Musick, two Things are to be consider'd, in order to discover the Changes made in the Mind, and Motions of the animal Fibres, from its Influence: First, how these exquisitely pleasing Sensations, it communicates to the Mind, are produc'd, from the Reason of Sounds. Secondly, how the Benefits are imparted to the Constitution of the animal Fibres from their Force.

Of the Sentiments of the Ancients concerning the Power of Musick, in Relieving of human Infirmities.

IT is the divine *Plato*'s Opinion, that the Charms of Musick has as great an Influence over the Mind, as the Air has over the Body; and by no means to be neglected, in the Cure of Diseases, where the Mind is equally affected with the Body: And as Medicines purge the Body of those grosser Humours, that clog the less noble Organs; so Musick purges the Soul of those gloomy Thoughts or Passions, that, if suffer'd to continue, will weaken, impair, and disconcert the Exercise of its noblest Faculties.

*CICERO*

*CICERO* alſo, is full on the ſame Subject, in his ſecond Book *De Legibus*; where, treating of Muſick, he thus expreſſes himſelf; *Vix dici poteſt, quanta ſit vis in utramque partem; namque & incitat languentes & languefacit incitatos, & tum remittit Animos tum contrahit.*

So that, by all Obſervations, as well ancient as modern, it appears, that Muſick can ſo irreſiſtibly work upon the Paſſions, as either to raiſe the dejected Ideas of the Soul, indulge the ſolemn compos'd Frame of the Spirits, or ſink them into the moſt abject and melancholy Sadneſs.

Now it is impoſſible to conceive how any kind of Muſick ſhould ever be able to alter the Mind, or its Faculties, in that ſtrange Manner, without inferring Changes in the Fibres of the Brain; unleſs there were a Senſe or Reaſon in the different Modulation of the Sound.

PART III.

How Musick produces different Changes in the Organs of the Brain, and consequently in the Exercise of the intellectual Faculties.

THAT, in order to produce these Changes, it is necessary that the oscillatory Force of the Air should vibrate against the Tympanum of the Ear, by whose Motion these finest Fibres of the auditory Nerve are affected, and consequently all those Fibres of the Brain that go to the forming of this Nerve, which are all those Fibres of the Brain where the intellectual Faculties have their immediate Residence.

THAT it is this peculiar Harmony, Consent, and Agreement, between the Motion of the Sound, the Motion of those fine Fibres of the Brain, and the Perception of the intellectual Faculties, that gives us those exquisitely pleasing Sensations, that so agreeably affect us upon the hearing of a well-play'd Consort; for there is a natural Agreement in Harmony, that depends on the regular Placing of the Notes in Tune, which we call Composition in Musick; and which, were it mathematically exact, would excite the highest, intellectual Pleasure, that the Mind of Man is capable of enjoying from Sound.

THAT

THAT the Sound itſelf, abſtracted from the Force or Motion, if that were poſſible, might afford to the Mind the ſame agreeable Satisfactions without the Impulſe; that is, the Sounds, from the intellectual Principle perceiving their Agreement or Reaſon, would be able to give us very ſurprizing Entertainments; yet, without the Motion, they could not ſo irreſiſtibly affect the Paſſions in that agreeable Manner they do; becauſe their Affections depend on the Impulſes of the fine Fibres of the auditory Nerve, which moves all thoſe Points of the Brain, that aſſiſt the Motions of the Paſſions.

So that, according to this mechanical Way of reaſoning upon this abſtruſe Subject, it clearly appears, that the raiſing or depreſſing of the Paſſions, depends on the Force of Sounds raiſing or depreſſing the Motions of the Fibres of the Brain; the Pleaſure of the intellectual Principle, on the different Modulation of the Tune, which is the Senſe of Sounds.

Now

PART III. Now as it is evident, that the Spleen and Vapours ariſe from diſorderly Sallies of the Paſſions, inferr'd from irregular Motions of the animal Fibres, ſo it follows, that nothing can give thoſe ſurprizing Turns, in the Cure, as Sounds duly modulated; for theſe muſical Sounds, conſiſting of a certain Degree of Motion, Impulſe, and Reaſon, (being convey'd to the Seat of the common Senſorium) neceſſarily brace, skrew up, and reſtore the *Machinulæ* of the fineſt Fibres; aſſwage the turbulent Motions of the Paſſions; and, at the ſame Time, communicate a ſovereign Pleaſure to the Mind itſelf; whereby Ideas, either chearful, gay, and enlivening; or ſolemn, ſad, and dejecting, are ſtruck upon the Soul, or at leaſt its principal Faculties, according to the different Impulſe, Reaſon, and Modulation of the Tune.

AND we are credibly inform'd, from the Records of Antiquity, that Muſick has that powerful Influence over the Paſſions, as well as intellectual Faculties, of the Soul; that it is capable of producing the moſt conſiderable Changes in animal Bodies;

Bodies; ſo that the moſt warlike Diſpoſitions, in their greateſt Rage, have been tun'd into Temper; while, on the other Hand, the moſt daſtard, cowardly Wretches, by its Force, have been ſpirited up to undertake the moſt bold, daring, and adventurous Enterprizes. 

## CHAP. V.

*Practical Obſervations concerning the Operation of ſome particular Medicines, in the Spleen, Vapours, and Hypochondriack Melancholy.*

BUT ſome, perhaps, may ſay, that if the Spleen and Vapours ariſe from theſe diſorderly Sallies of the Paſſions, and if Muſick have this powerful Influence in aſſwaging theſe Tumults, and reſtoring the contractile Powers of the animal Fibres; to what End and Purpoſe

PART III. Purpoſe ſerve the Preparations of Medicines?

To this I anſwer, To very good Ends and Purpoſes every Way; for though the Force of Sounds have this Influence in Reſtoring the Texture of theſe fineſt Fibres of the Brain, that immediately ſupport the Action of the Paſſions; yet the Stomach, the Spleen, and other inferior Organs of the Habit, demand a coarſer Treatment, in order to reſtore their Fibres to a regular Standard.

I SHALL, therefore, in this Chapter, proceed to take into Conſideration, the Nature of thoſe Medicines moſt proper to be employ'd in theſe Diſorders, the Manner of their Operation, the Changes and Alterations they infer in thoſe groſſer Organs, in order to compleat a ſucceſsful Cure.

Of Bleeding, and its Effects, in the Spleen.

Now though Bleeding be a Diſcharge highly improper under moſt Kinds of ſplenetick Affections; yet in bilioſe or ſanguine Conſtitutions, in Caſes where Symptoms of a plethorick Diſpoſition exiſt,

exiſt, eight or ten Ounces may ſafely be taken away with Advantage; though certainly unleſs manifeſt Indications give ſome Tokens or Marks of its Neceſſity, it is a Diſcharge leaſt of all to be indulg'd in the Spleen; for it weakens the contractile Force of the Fibres, lets down their *Machinulæ* already too much relax'd, and impairs the Motion of the Blood and Spirits. However, it ſeems moſt particularly indicated in convulſive Coughs, in ſharp, acute Pains, that often affect vapouriſh Women in the hyſterick Cholick: And in theſe Caſes it ought to be adminiſter'd in the Beginning, not when Nature is almoſt ſunk, through the Violence of the Diſeaſe. 

Of Vomits, and their Effects.

But though Bleeding is a very precarious Operation, and not to be adminiſter'd without good Advice, yet Vomits skilfully manag'd, are the moſt ſovereign Remedies, that Nature has provided us with in the Republick of Phyſick, againſt the Spleen. Theſe Medicines, from the advantageous Situation of the Stomach, give a conſiderable Turn to ſeveral chronick Diſeaſes lodg'd in the lower

PART III. lower Organs of the Habit; for they pump from the extremeſt Parts of the Body, thoſe Humours that cannot ſo commodiouſly be diſcharg'd by any other Evacuation. They ſhake the ſtubborn Humours impacted in the Lungs, Stomach, Spleen, inteſtines, and meſentery Glands, reſolve the Obſtructions of their ſeveral Fibres, and, by their Force and Straining in the Operation, very much reſtore the *Machinulæ* of the over-relax'd Fibres.

BUT thus much I muſt confeſs, that Perſons of bilioſe Conſtitutions, as alſo, thoſe that have long Necks, ſtrait Cheſts, and ſmall Veins, do not bear the Effects of a Vomit, or other Medicine that may ſubject the Body to a harſh or violent Operation, without great Emotion.

Of Purging Medicines.

IN theſe Caſes we muſt endeavour to procure the Benefit of vomiting Medicines, by thoſe that work by Seige or Stool. However, great Regard muſt always be had to the different Temperature of the Habit: Hot, dry, and bilioſe Conſtitutions, will require gentle,

cooling, relaxing Medicines, and such as may check the over-violent, contractile Force of the Fibres, assuage the Heat and Motion of the Juices, and compose the Hurry and Tumult in the several Organs of the animal OEconomy, for which End and Purpose, I know nothing preferable to the following. 

℞ *Extract. Cassiæ* ʒi. *Crem. Tart.* ʒiii. *Syr. Violar.* ʒvi. *m. f. Bol. capt. Mane.*

In some Cases of the Spleen, the *Epsom*, or *Glauber* Salts, prove an excellent Remedy to cool the Body. But if the Patient be of a sanguine Constitution, that is, less abounding with Bile or Choler, then the following will be preferable.

℞ *Fol. Sen.* ʒiii. *Rhabarb.* ʒi. *Sem. Fœnic. dulc. Rad. Glyceriz. ana* ʒi. *coq. in Aq. Font.* ʒvi. *ad* ʒiii. *colat. cui adde Man. opt. dis.* ʒi. *Aq. Cin. fort.* ʒiii. *m. f. Haust.*

Or in Cases where the Habit is less sanguine, that is, more abounding with Phlegm,

PART III.

℞ *Tinctur. Sacr.* ℥iiß, *Syr. de Spin. Cervin.* ℥ß, *m. f. Hauſt.*

BUT in cold, phlegmatick Conſtitutions, where the Motions are greatly depreſs'd beneath the Standard of Nature, the warmer cordial Purges will be the moſt proper Medicines to be given.

℞ *Elix. Salut.* ℥iiß, *Syr. de Spin. Cervin.* ℥vi. *vel* ℥i. *m. f. Hauſt. vel,*

℞ *Calomel.* gr. xx. *Extract. Rud. Pill. ex Duobus ana* gr. xvi. *m. f. Pill. No.* 5, *cap. Manè cum Regimine.*

AND thus, by varying the Preſcription, according as the Conſtitution differs, we arrive at the greateſt Certainty in the Application of Remedies: And the Reaſon why purging Medicines ſo often deceive the Expectations of the Phyſician, under the Spleen, is not that they are improper in the Diſeaſe itſelf, but only diſagreeable to that particular Conſtitution.

AND

AND I have known my ſelf, a purging Medicine run off from the Bowels, and give the Patient 30 or 40 Stools, which was intended, by the Adminiſtrator, to give not above three or four; and if he had conſulted the Patient's Conſtitution, he might eaſily have diſcover'd the Reaſon why that Remedy was highly improper for him under theſe Circumſtances.

WHEN the Juices are reduc'd to their juſt Standard and Quantity, by proper Evacuations, it will then be proper to brace the Solids, and reſtore their *Machinulæ*; and I know no Remedies in Nature that perfect this Branch of Practice with better Succeſs than Steel Preparations, the Bark, and Chalybeat Waters. Theſe are moſt proper to reſtore the impair'd Digeſtions of the Stomach, Bowels, and Organ of the Spleen: But as I have diſcours'd of theſe ſeveral Remedies with ſome laudable Exactneſs, in my *New Method of Treating Conſumptions*, ſo it would be *actum agere* for me to enlarge again upon them in this Diſcourſe.

PART III.

Of the Effects and Virtues of Opium.

BUT of all Medicines in the Spleen, I know none equal or fit to compare with that truly noble Drug we call Opium. It's our Refuge in all Diſtreſſes; it gives Eaſe and Relief in the moſt torturing Pains, and when all other Remedies fail; and as I have not taken Notice of its Operation in any of my former Works, ſo I ſhall beg the Reader's Favour to enlarge a little upon its Virtues in this Place.

OPIUM is a Medicine of that ſingular Benefit, under the Spleen, that in ſome Caſes it would be impoſſible to procure any Relief without it. I ſhall therefore endeavour, as briefly as I can, to diſcover the Nature of its Qualities, from thoſe viſible Effects we generally perceive to accompany its Operation.

Of its Operation in bilioſe Conſtitutions, and its cauſing Sleep.

I KNOW it is the Opinion of ſome, that opiate Medicines raiſe the Contraction of the Solids, accelerate the Circulation of the Blood, the Secretion of the Spirits, and thin the Humours; but theſe Effects cannot ſo properly be ſaid to proceed from any Qualities of the Opiate,

imme-

immediately acting upon the Nerves, as from the Effects that ſucceed its Operation; for by relaxing the Fibres of the Brain and Nerves, it ſets their *Machinulæ* at ſuch a Diſtance from each other, as either totally deſtroys their Senſations, or at leaſt greatly impairs them; whereupon it comes to paſs, that the Perceptions are intercepted for a while, and a pleaſing Stupefaction brought on upon all the Organs, that ſerve the ſeveral Senſes, which Phænomenon we call Sleep. CHAP. 5.

Now in all Caſes of Sleep, the Perſpiration is conſiderably leſſen'd, upon which the Heart beats with a ſtronger Impulſe, and Reſpiration is more laborioufly perform'd; which Effects may cauſe a greater Reſolution of the Juices, not any way depending on the Doſe of the Opiate, but only on the Sleep ariſing from that Doſe.

Of its Effects in phlegmatick Conſtitutions.

THAT opiate Medicines retard the Motion of the Juices, ſlacken the Secretions, and infer a Languor upon all the Organs, is evident from their Effects, generally obſervable in groſs, corpulent

PART III. Conſtitutions, or Bodies ſubject to humoral Coughs, Aſthma's, *&c.* in which Caſes, when unskilfully directed, they often thicken the Juices to that Degree, as to be attended with Effects moſt fatally preternatural. Theſe Conſequences enſue, by its locking up the Humours on the bronchial Glands, and thereupon choaking the Patient.

FROM theſe Obſervations on its known Effects, and Qualities, it naturally follows, that as much depends on the different Texture of human Bodies, as any Motions in the Corpuſcles that compoſe that Remedy: And this appears evidently clear, from the contrary Effects it often produces in different Conſtitutions, and in the ſame Conſtitution at different Times.

I HAVE known a well-adapted Doſe of Opium, or its Preparation, cauſe ſweet Slumbers, and agreeable Reſt, to ſome, and continual Wakefulneſs to others, a Light-headedneſs to a third. This ſame Remedy has caus'd Sleep at one Time, Wakefulneſs at another, and

a Delirium the third Night, in the ſame Perſon. Theſe Changes could not happen from any Alterations in the Corpuſcles of the Opium, which are always the ſame, but from an Alteration in the Motions of the Solids and Fluids, which greatly vary in different Conſtitutions, and often are different, at divers Times, in the ſame Individual labouring under the ſame Diſeaſes. CHAP. 5.

THE Neceſſity of Opiates appears moſt conſpicuous, in thoſe ſharp, cholicky Pains, that frequently attend hyſterick Women under Fits of the Vapours; they are alſo equally neceſſary to quiet the exceſſive Diſorders of the animal Spirits, when the Patient lies whole Nights and Days without the leaſt Inclination to ſlumber. In theſe Caſes they act by ſuſpending the Motions of the nervous Fibres; this Suſpenſion ariſes from the *Machinulæ* of theſe Fibres being generally ſet at too great a Diſtance from each other; whereby the Impreſſions of thoſe painful Senſations cannot reach the Seat of the common Senſorium. Whence the Neceſſity of its Operation is indicated.

PART III. To conclude; From the foregoing Reaſonings on this Subject, it clearly appears, that the Operation of Opiate, as well as all other Remedies, are relative to the Conſtitution of animal Bodies, which is the Reaſon why their Effects are widely different, according to the natural, different State of the Body, according to the different Diſeaſe the Patient labours under, and according to the Advances that Diſeaſe has made on the Conſtitution; all which Particulars, mightily vary the Operation of this moſt excellent Remedy. So that it always demands the Aſſiſtance of a skilful Phyſician to preſcribe it with Safety to the Patient.

Of Wine, and its Influence on human Bodies.

If ever a Cordial is neceſſary, if ever it is allowable for Men to intermit their Cares, by chearing the Spirits with a Glaſs of generous Wine, no Time can be more ſeaſonable, than That wherein the Mind is oppreſs'd with Grief, Anxiety, and almoſt overcome with Deſpair. Wine, therefore, is not only permittable in the Spleen, but the Patient is often to be call'd upon to relax his Mind, from his more intenſe Thoughts, looſen

looſen his Cares, and ſoften his more gloomy, melancholy Hours, with a flowing Glaſs of this moſt generous Cordial. How it comes to have this Influence over human Nature, may be worth our while here to examine. CHAP. 5.

WINE conſiſts of a certain Portion of ſulphurous Spirits diſſolved in a pretty large Quantity of tartarous Phlegm, and is in its Action contrary to the Operation of Opium, tho' their Effects be pretty nearly the ſame: For whereas opiate Preparations relax the Brain and Nerves, already too much relax'd, and lets down the *Machinulæ* of their Fibres beneath their Capacity of Senſation; Wine, on the contrary, if taken in a large Doſe, contracts the foregoing Inſtruments, and purſes up their too lax *Machinulæ*, whereby the Fibres are incapable of conveying thoſe active Senſations to the Brain and Seat of the common Senſorium: However, both Wine and Opium intercept the Senſations, and infer a Stupor upon all the animal Faculties.

IN ſhort, I am not at all ſurpriz'd at thoſe extravagant Encomiums that the Poets

PART III. Poets generally compliment this moſt exhilerating Juice with; becauſe it is a moſt ſovereign Solace againſt the moſt gloomy Scenes and Miſeries of Life: It is before Opium, and all the other Remedies ever yet diſcover'd to Mankind; and will perform every thing that Opium can do, and more effectually, if the Doſe is but large enough, often repeated, and the Patient was not too indulgent in its exceſſive Uſe before.

But this I muſt obſerve, that, like all other Remedies of excellent Efficacy, if indiſcreetly us'd, it becomes pernicious, and ſometimes fatal, in its Effects; but then is not Opium attended with the ſame dangerous Conſequences? *Proſper Alpinus* relates of Opium, that thoſe that accuſtom themſelves to its liberal Uſe, appear always drunken, ſottiſh, and comatoſe; they are ſtupid, inconſtant, and ſo light in Temper, that few People care to converſe with them: All of which Effects, are plainly viſible in Wine, when indulg'd to Extreams. So that Wine, rightly adapted to the peculiar Genius and Temperament of the Patient, is one

of

of the moſt generous Remedies that can be adminiſter'd under the Spleen, Vapours, and Hypochondriack Melancholy. For as, in theſe Diſorders, the Nerves are let down beneath their natural Standard, ſo it braces their over-lax Texture, ſcrews up their Fibres, and brings their *Machinulæ* into cloſer Contacts with each other, whereby the Mind acts with greater Steadineſs, Reſolution, and Vigour. CHAP. 5.

## CHAP. VI.

### *Of the Cure of the Spleen.*

HAVING in the foregoing Chapter proceeded to lay before the Reader ſeveral practical Obſervations concerning the Operation of divers Medicines, I ſhall now go on to make the particular Application of thoſe practical Obſervations, to the ſeveral Stages of the Spleen, Vapours, and Hypochondriack Melancholy.

THE

PART III.

THE Phyſician therefore, when he goes upon the Cure of the Spleen, ought to be highly careful, that he duly weigh all the preſent impending Symptoms, the Degrees of the Diſeaſe, and the Advances it has made; and if upon Enquiry he perceives it only a Beginning, his Task will be ſo much the leſs difficult: For nothing is more eaſy than to relieve the Spleen in its firſt Beginning, nothing more hard than to cure it when c onfirm'

Of the particular Indications of Cure.

THE Indications of Cure, therefore, will be very different in different Habits; which again will vary mightily, according to the different Cauſe that ſtruck the Diſeaſe upon the Organs, according to the different Parts of the Body it is ſeated in, and according to the Advances it has made upon the Conſtitution.

Now, as the *Machinulæ* of the Fibres are always relax'd under the Spleen, whereby their Actions and Senſations are impair'd, it neceſſarily follows, that in order to reſtore theſe impair'd Organs, we muſt endeavour to reſtore the proper Elaſ-

Elaſticity of the Fibres, which will demand the ſeveral Indications following. CHAP. 6.

Firſt, To take care to diſcharge the Body of thoſe groſs Humours, that, thro' a Languidneſs in the ſecretory Glands, are lodg'd upon the Fibres. Secondly, To reſolve the Obſtructions of the Spirits, Nerves, and circulating Fluids. And laſtly, To reſtore the impair'd Tone of the Brain and ſeveral Organs, whereby the intellectual Faculties may act with Steadineſs, Reſolution, and Vigour.

The firſt curative Indication.

As to the firſt curative Indication, it is a Point that deſerves very great Conſideration; for the Evacuations muſt vary, as I obſerv'd before, according to the different Temperature of the Solids. If the Patient be of a hot, bilioſe Conſtitution, I generally adviſe him to loſe ten Ounces of Blood; which Diſcharge gives a greater Freedom for the remaining Quantity to play.

AFTER Bleeding, if the Body be very coſtive, I preſcribe the following Glyſter.

℞

PART III. ℞ *Decoct. Com. pro Enemat.* ℥xii. *Mel. Violar.* ℥ii. *Elect. Lenit.* ℥iß, *Sal. Gem.* ʒiii. *m. f. Enema.*

AFTER which, he may, the next Morning, take the following purging Draught.

℞ *Fol. Sen.* ℥iii. *Rhabarb.* ʒß, *Sem. Fænic. dulc.* ʒi. *Coq. in Aq. Font.* ℥vi. *ad* ℥iii. *Col. cui adde Man. opt.* ℥iß, *Aq. Peon. C.* ℥ß, *m. f. Hauſt.*

BUT if the Patient be of a phlegmatick Conſtitution, that is, if his Solids be leſs elaſtick, or ſpringy, which is always diſcoverable from the Beating of the Pulſe, and other concurring Symptoms, that affect the Habit, I then omit Bleeding, and inſtead of Purging, preſcribe the following Vomit.

℞ *Rad. Ipocacuhan.* ʒi. *Aq. Lact. Alex.* ℥iß, *Oximel. Scillit.* ℥i. *Aq. Peon. C.* ℥ß, *m. f. Hauſt. capt. Hora 4ta, vel 6ta, veſperi ſuperbib. copioſe ſeri lactis vin. canarin. alterati.*

AND, to compoſe his Spirits, after the Operation is over, I generally preſcribe the following Powder and Draught.

℞

℞ *Pulv. e Chel.* 69. C. ℈i. *Croc. Pulv. Sal.* CHAP. 6.
*vol. Succin. ana gr.* iii. *m. f. pulv. capt.*
*hora Som. ſuperbibend. Hauſt. ſeq.*

℞ *Aq. Ceraſ. Nig.* ℥iß, *Aq. Peon. C.* ℥i. *Syr.*
*Crocin.* ℥iii. *Laud. Liq. gutt.* xx. *m. f. Hauſt.*

BUT if Bleeding be judg'd abſolutely neceſſary from the Heavineſs of the Head, and a Stupor upon the Brain, which do not give way upon the Adminiſtration of the foregoing Vomit, nor that repeated; I then immediately order Blood to be extracted by cupping with Scarrification, which often gives great Relief under this Symptom: And if the Spirits flag, let a good Bliſter be apply'd between the Shoulders. Theſe are Diſcharges abſolutely neceſſary, where we would ſucceed in a Cure ſupported upon rational Principles.

Of the ſecond curative Indication.

IN relation to the ſecond curative Indication, as the Coheſions of the Blood and other Juices, in the Beginning of the Spleen, are only forming themſelves upon the Habit, ſo ſimple, eaſy Medicines will be ſufficient to remove their Obſtructions. Small Quantities of Steel joyn'd

PART III. join'd with Aromaticks, in Conjunction with Blisters, will answer the End of a Cure much better, than a pompous Shew of doing a great deal more than is really necessary; much of which is often nothing to the Purpose; for where Nature is very much sunk, and the Solids depress'd beneath their natural Standard, there the Physician is to assist her, in reducing these several Organs within their proper Sphere of Action again; and he is the only Person capable of judging how much they are depress'd, and what Force will be necessary to restore them again to their proper Standard. These several Parts he may easily learn, both from the impending Symptoms, the Complaints of the Patient, and the Appearance of Things as they are conducted in the Animal OEconomy; and as the Stomach is the first Bowel that generally suffers under the Spleen, so great Regard must always be paid to those Medicines that assist in restoring the impaired Force of its Fibres.

℞ *Conserv. Absinth. Rom.* ʒi. *Flav. Aurant.* ʒvi. *Pulv. Ari Comp.* ʒiii. *Spec. Diamb. fine*

*ſine od.* ʒi. *Rubigin. Fer.* ʒiii. *cum q. ſ.* CHAP. 6.
*Syr. Papav. erratic. m. Elect. capt. quant.*
*Nuc. jugland. omni Mane hora 4ta, Pomerid. & hora Som. ſuperb. Hauſt. ſeq.*

℞ *Abſinth. Roman. M.* i. *Summit. Abrotan.* ʒii. *ſem. Cardamom. minor. Coriand. ana* ʒiß, *Rad. Gent.* ʒi. *Coq. in Aq. Font.* ℔i. *ad* ℥xii. *Colat.*

℞ *Colatur.* ℥ii. *Vin. Chalyb.* ʒii. *Aq. Peon. C.* ℥ß, *m. f. Hauſt.*

I ALWAYS at Night take care to ſecure the Tranquility of the Spirits by gentle Opiates; becauſe the Patient, under the Spleen, is very apt to be affected with Wakefulneſs.

℞ *Aq. Lact.* ℥iß, *Aq. Peon. C.* ℥ß, *Spt. Lavend. compt.* ʒi. *Syr. è Mecon.* ℥i. *m. f. Hauſt. capt. omni Nocte Hora ſom. vel,*

℞ *Extract. Thebaic. gr.* iß, *Theriac. Androm.* ℈i. *m. f. Bol. capt. hora ſom. cum Hauſt. Aq. Font. & vin. alb. mont. ana part. equal.*

THIS Method of treating the Patient, I find always to anſwer in the Beginning of the Spleen, and while the Diſeaſe is recent; but when it has been of any

 conſi-

PART III. considerable Standing, and the Solids are greatly impair'd, I find it then necessary to employ more considerable Forces, in order to overcome the Stubbornness of some splenetick Symptoms. In this Case I generally find great Relief given from the following Medicines, especially if the Patient be of a dull, heavy, phlegmatick Constitution.

℞ *Calomel.* ℈i. *extract. Rud. Pill. Coch. minor. ana gr.* xvi. *ol. Fænic. dulc. gtt.* i. *f. Pill.* N°. 5. *capt. Mane cum regimine & repet. pro re nata.*

℞ *Aq. Cerasor. Nig.* ʒiß, *Aq. Peon. C.* ʒi. *Laud. Lond. gr.* iiß, *Spt. Sal. vol. ol. gtt.* xx. *Syr. Garioph.* ʒiii. *m. f. Haust. capt. hora som.*

℞ *Conserv. Anthos* ʒi. *Cochlear. Hort.* ʒvi. *Cinnab. Nativ.* ʒß, *Flor. Sulph.* ʒiß, *Specier. diambr. sine od.* ʒiß, *cum q. s. Syr. de Chalyb. m. Elect. Molle capt. Quant. Nuc. Moschat. horis tribus medicinalibus superbib. Cochlear.* 5. *seq.*

℞ *Aq. Cerasor. Nig.* ʒvi. *Aq. Peon. compt. Raphan. compt. ana* ʒiii. *Syr. de* 5*que Radicibus* ʒiß, *Spt. Nitr. dulc.* ʒii. *m. f. Julap.*

CHAP. 6.

WHEN the Spleen ariſes from a Suppreſſion of the Hemorrhoides, vulgarly call'd the Piles, or any other cuſtomary Evacuation, we muſt by all Means endeavour to recover that Diſcharge. In this Caſe, I know nothing that gives more immediate Relief, than Leaches apply'd to the hemorrhoidal Veins, which quickly diſpoſe them to a plentiful Running; and this more eſpecially happens, if the Patient ſits over a Veſſel of warm Water; and as the Fœces of the Bowels are generally hard, and the Body coſtive, ſo the following will be admirably proper, both to relax the Inteſtines, ſoften the Excrements, and give them an eaſy Diſcharge in ſoft, figur'd Stools.

℞ *Ol. Amigd. dulc.* ℥iiß, *Syr. Violar.* ℥ii. *Flor. Sulph.* ʒii. *m. f. Linct. capt. Cochleare* i. *6ta, quaque hora vel.*

℞ *Extract. Caſſiæ* ℥iß, *Calomel.* ℈iß, *ol. Aniſ. gt.* iii. *Crem. Tart.* ʒß, *m. Elect. capt. Quantitat. Nuc. Moſchat. ter in ſeptimana ſuperbib.* ℔ß, *ſeri Lactis.*

HITHERTO we have purſu'd thoſe curative Indications, that ſerve to clear the

Of the laſt curative Indication.

PART III. first Paſſages, to reſolve the Obſtructions that clog the Wheels of the circulating Fluids, and reſtore the impair'd Force of the arterial Solids.

THE next Point, that comes under Conſideration, is, to diſcover how we may ſafely reſolve the Obſtructions of the Brain, and reſtore its Fibres, whereby the intellectual Faculties will be enabled to act with Steadineſs, Reſolution, and Vigour.

In this Caſe, I know nothing preferable to the following Preſcription.

℞ *Gum. Ammoniac.* ʒii. *Caſtor. Ruſ. Specier. Diamb. ſine od. ana* ʒi. *Milleped. pptt. Sal. Vol. ſuccin. ana* ℈ii. *Croc. Pulv.* ʒβ, *Balſ. Peru. gt.* xx. *cum q. ſ. Syr. de Chalyb. m. f. Pill. è* ʒi. N°. x. *capt.* 3, *vel* 4, *mane & hora ſom. ſuperbib. Cochlear.* 6. *ſeq.*

℞ *Vin. Viperin.* ℔i. *Spt. Sal. Armoniac.* ʒiſs, *m. Julap.*

THESE Medicines not only reſolve the Obſtructions, that embarraſs the Fibres that

that compoſe the whole Syſtem of the Brain, but they ſcower its Glands of thoſe viſcid Corpuſcles, that ſtick in their Orifices, and render the Secretions of the Spirits ſlower, than is conſiſtent with a regular Motion. 

As ſoon as the Patient is recover'd in ſome meaſure from his Preſſure, I always adviſe him to drink either the *Bath* Waters, the *Spaw* Waters, or the *Piermont* Waters; theſe muſt be regulated according to the different Conſtitutions we have to deal with. In ſome Caſes, I prefer a Courſe of the chalibeat Waters of *Tunbridge*, *Iſlington*, or *Hampſtead*, before them all; eſpecially if the Conſtitution be highly ſcorbutick, which, if he is regular in his Exerciſe and Manner of Diet, will mightily avail in confirming a ſound Habit of both Body and Mind.

## CHAP. VII.

### *Of the Cure of the Vapours and Hysterick Fits.*

TO cure the Vapours, is to prevent the Return of the Fits; and as this Diſeaſe is moſt incident to affect the fair Sex, ſo I ſhall conſider the peculiar Indications moſt proper to relieve its Symptoms in Women labouring under their Tyranny. I know that in appeaſing the Symptoms of the hyſterick Paroxiſm, eſpecially in the ſtruggling Fits, a great many Remedies are generally recommended by the By-Standers; ſuch as ſtrict and painful Ligatures to divers Parts of the Body, the violent opening the Hands, twiſting or twining of the Fingers, holding ſtinking Things to the Noſe, *&c.* whereby they endeavour to facilitate the Periods of the Fits. But I muſt confeſs, I never could perceive the leaſt Benefit from theſe antiquated Fooleries: nor is it poſſible there ſhou'd; for the Fits being excited to fling off a Load oppreſſive to the Conſtitution, how is it poſſible to relieve the Fits before Nature has done her Work, in removing the immediate

How to manage the Patient in the ſtruggling Fits.

mediate Cauſes. All, that, in theſe Ca- CHAP. 7.
ſes ought to be done, is, to take care the Motions of her Limbs be ſo manag'd, that ſhe do not injure herſelf with the Violence of her Struggles; for what Occaſion is there for preſcribing of Medicines, when the Fits will be over in a ſhort Time of themſelves.

As ſoon as ever the leaſt Remiſſion offers, I always preſcribe the following

℞ *Aq. Font.* ℔ß, *Syr. Violar.* ℥i. *Laud. Liquid. gtt.* xx, *Spt. Vitriol. gtt.* xxv. *m. f. Hauſt. quamprimum propinandus.*

In the Cure we ought to vary the Preſcription, according to the different Conſtitution of the Patient, and the different Parts affected. If the Diſeaſe ariſes from Obſtructions of the Womb, which indicate the Fibres of the Matrix, too weak to help forwards the menſtrual Diſcharge; and if a Plethora appear in the Veſſels, twitching Pains affect the Head, a Swimming, Giddineſs, and other Symptoms, the Brain, ſure Attendants on Obſtructions; I think it will

PART III. not be improper if the Patient lose ten or twelve Ounces of Blood, which will take off from the Fulness of the Vessels, whereby there will be more Room for the remaining Quantity to play, upon which it will excite a considerable greater Impulse in its Descent upon the obstructed Vessels of the Matrix, in order to give a Freedom to the menstrual Discharge.

AND here I think proper, once for all, to observe, that Bleeding in all splenetick Diseases, is as much to be determin'd from the particular Indications of the Constitution, as any inseparable Symptoms of the Disease.

AFTER Bleeding, if the Patient be subject to Reachings, I think it not improper to prescribe a Vomit, in order to dislodge the Stomach of those phlegmatick Humours, the Cause of Indigestion: But this I must observe, that the Physician should be highly careful that none but those of the mildest Operation be given to Women of weakly Constitutions. For my own Part, I never venture further than the Indian Root *Oximel Scil.* or *Sal. Vitriol.* as the gentlest

gentleſt of this Claſs of Medicines; and theſe I often order to be repeated at proper Intervals, as Occaſion requires, with happy Succeſs. CHAP. 7.

BUT if Vomits are judg'd unſafe Medicines, from any Contra-indications, we muſt then attempt to diſcharge this Load of Phlegm by Laxatives, that may clear the firſt Paſſages of thoſe vitious Contents.

℞ *Tinct. Sacr.* ℥iiß, *Syr. de Spin. Cervin.* ℥ß, *Sal. Vol. ol. gtt.* xx. *m. f. Hauſt.*

THIS Draught thus circumſtantiated, helps to move off thoſe ſluggiſh Humours that by a colder Purge would ſcarce be effected; and in hot and dry Habits we have Medicines that are cold and ſtimulating, or at leaſt produce thoſe Effects, in order to aſſiſt the Contraction of the Solids to diſcharge theſe Humours. Of theſe kind of Medicines are the *Epſom* Salts, and purging Waters.

AFTER we have proceeded thus far, we muſt go on to aſſiſt the circulating Fluids with chalibeat Preparations.

℞

℞ *Conserv. Flav. Aurant. Nuc. Moschat. Cond. Citr. cond. ana* ʒvi. *Spec. Diamb. sine od.* ʒiß, *Chel. Canc. pptt. oc. canc. pptt. ana* ʒiß, *Chalyb. simpliciter pptt.* ʒiii. *cum q. s. Syr. è Cortic. Citr. m. Elect. Molle capt. Quantitat. nuc. Moschat.* ʒbus *horis medicinalibus, superbib. Cochlear. 4. seq.*

℞ *Aq. Cerasor. Nig.* ʒiv. *Aq. Puleg.* ʒii. *Aq. Hysteric.* ʒiiß, *Tinct. Castor.* ʒiii. *Sachar. Albis.* ʒii. *m. f. Julap.*

℞ *Aq. Cerasor. Nig.* ʒii. *Aq. Bryon. compt.* ʒii. *Syr. è Mecon.* ʒi. *Spt. Lavend. C.* ʒi. *m. f. Haust. capt. omni Noct. hora som.*

*Applic. Emplast. Epispast. amplum & Acre Nuchæ duo alia internis Brachiis totidem internis cruribus spatio intermisso.*

And then to relieve and ſtrengthen the Brain, I would adviſe the following.

℞ *Galban. Col.* ʒiß, *Assæ fœtid.* ʒi. *Rad. Zedoar.* ℈ii. *Sal. Vol. suc.* ʒß, *Balsam. Peru* ℈i. *cum q. s. Syr. de Chalyb. m. Pill. capt. 4tr. vel 5que, Mane & Hora som. cum Cochlear. 4tr. Alicujus Julap.*

But here I muſt beg Leave to obſerve, that volatile Salts and Spirits, in many Caſes of convulſive Diſeaſes, are very improper Remedies. They are ſo in all bilioſe Conſtitutions, where the Nerves, through an over-great Contraction of their *Machinulæ*, are naturally ſo eager, that the leaſt ſudden Surprize, Impulſe, or Paſſion, ſhall readily diſpoſe them to Spaſms, Tremors, or hyſterick Fits. And as theſe Diſorders ariſe from the *Machinulæ* of the Fibres, being naturally too much purs'd up; ſo theſe Salts, inſtead of allaying, very often increaſe thoſe Startings and irregular Motions of the Muſcles and Tendons, through their exceſſive Heat, and ſtimulating Qualities. They beſt agree in groſs, corpulent Women, in heavy, phlegmatick Conſtitutions, where the Blood moves ſlowly in the Veſſels, its Corpuſcles are extremely viſcid, and ſtrongly attracted to each other; and for this Reaſon theſe Salts are highly ſerviceable in palſical Affections, where the Senſations and Motions of the ſeveral Members are in ſome meaſure deaden'd, and want informing from a Courſe of generous Medicines.

PART III. IF, notwithstanding all that has been done, the Fits return, we must have recourse to the *Cortex Peru*, upon the next Intermission; and I have known great Relief given from the following.

℞ *Conserv. Rut.* ʒi. *Conserv. Anth.* ʒß, *Cortic. Peru* ʒvi. *Cortic. Winter.* ʒiii. *cum q. s. Syr. Garioph. m. Elect. capt. Quant. Nuc. Jugland. 6ta, quaque hora superbib. Haust. seq.*

℞ *Cortic. Peru* ʒß, *flor. Chamomel. M.* i. *Cochinel.* ʒiß, *coq. in Aq. Font.* ℔iß, *ad* ʒxii. *col.*

℞ *Col.* ʒii. *Vin. Chalyb.* ʒiii. *Spt. Lavend. C.* ʒi, *m. f. Haust.*

Of the Management in the painful Fits.

THESE are the most sovereign Remedies I can think proper in this Case.

BUT not so must we attack those hysterick Fits attended with great Pains; these demand immediate Assistance, and Opiates will afford the most sovereign Relief under these Circumstances.

IN that most inexpressible Torture, call'd the hysterick Cholick, I have known

known the following give immediate Re- CHAP. 7.
lief.

*Mit. Sang. è Brachio ad* ℥xii. *quamprimum.*

℞ *Pill. ex. 2bus, gr.* xxvi. *Calomel.* ℈i. *Ol. Garioph. gtt.* vi. *Extract. Thebaic. gr.* iii. *m. f. Pill. capt. quamprimum ſuperbib. Hauſt. ſeq.*

℞ *Aq. Puleg.* ℥i. *Aq. Peon. C.* ℥vi. *Tinct. Croc.* ℥ii. *Syr. Balſam.* ℥iii. *m. f. hauſt.*

IN ſome Caſes, where this moſt inſufferable Pain has been lodg'd in the Crown of the Head, I have known the following, to bathe the Temples, of great Efficacy,

℞ *Spt. Lavend. C.* ℥iß, *Spt. Sal. Armon.* ℥ß, *Spt. Vin. Camphorat.* ℥ß. *m. f. mixt,*

AND immediately, to relieve the Brain and Parts affected, adminiſter the following.

℞ *Camphor.* ℈i. *Confect. Rhaleian.* ℈iß, *Laud. Lond. gr.* iii. *m. f. Bol. capt. quamprimum ſuperbib. Hauſt. Julap. ſeq.*

℞

PART III.

℞ *Aq. Ceraſ. Nig.* ℥vi. *Aq. Bryon. C.* ℥iii. *Marg. pptt.* ʒiß, *Sachar. Albiſſ.* ʒiii. *Sal. vol. ol.* ʒi. *m. f. Julap, capt. Cochlear.* iv. *cum Bol. in Languoribus.*

*Applic. Emplaſt. Epiſpaſtic. amplum & Acre Nuchæ & duo alia pone Aures.*

AND in caſe the Pain remit not, let Leaches be apply'd to the Veins, as near the Parts affected as poſſible; and ſometimes Cupping with Scarification avails very much.

BUT all other Means failing, and the Pains continuing obſtinately violent, againſt the Efforts of the moſt generous Medicines, we muſt have recourſe to Arteriotomy in the temporal Artery, the opening of which, has been experienc'd to give great Relief in the extremeſt Caſes of Pain.

AND thus I have given the Reader a ſuccinct Account of all that is neceſſary to be done in the hyſterick Paroxiſm, as well when the Fits are attended with violent Motions, as in thoſe that are ſubject to the moſt acute Pains.

BUT

CHAP. 7. In the ſtill Fits.

BUT in the ſtill Fits, where all the Parts are convuls'd, unattended with Strugglings, we are to conſider, that in this Caſe all the Fluids move more ſlowly in the Veſſels, and that therefore we are to endeavour to facilitate their impair'd Contractions, in order to reſtore their Motions. In this Caſe, as theſe Fits generally ariſe from ſome violent Paſſion, that originally gave a Shock to the Conſtitution of the Nerves, ſo the Cure will be extremely difficult, and nothing but Time will be able entirely to eradicate the Diſeaſe. However, Methods muſt be try'd; and among all the Remedies generally us'd, I know nothing equal to the following, both to leſſen the Fits, and cure the Diſeaſe.

℞ *Elix. Salut. Tinct. Sacr. ana* ʒiſs, *Syr. de Spin. Cervin.* ʒß, *m. f. Hauſt. capt. Mane cum Regimine.*

℞ *Aſſæ fœtid.* ʒiii. *Sal. Vol. Armon.* ʒi. *Croc Pulv.* ʒß, *m. f. Pill. è* ʒi. N°. xii. *capt.* 4. *hora ſom.*

℞ *Conſerv. Rut.* ʒiſs, *Chalyb. ſimpliciter pptt. Theriac. Androm. ana* ʒß, *Sal. Abſinth.* ʒii. *cum q. ſ. Syr. Artemeſiæ*

*m.*

*m. Elect. capt. Quant. Nuc. Moschat. omni Mane, 2bus Horis ante Prandium & Hora 4. Pomerid. superbib. Cochlear. 6, Infus. seq.*

℞ *Decoct. Amar. Simp.* ℥xii. *Aq. Peon. compt.* ℥iii. *Spt. Lavend. C.* ℥ß, *m.f. Infusio.*

℞ *Aq. Ceraſor. Nig.* ℥iß, *Aq. Peon. C.* ℥i. *Extract. Thebaic. gr.* ii. *Syr. Papaver. erratic.* ℥iii. *m.f. Hauſt. capt. hora ſom. cum 4. Pill. preſcript.*

BUT, in the Adminiſtration of all chalibeat Medicines, we ought to be highly careful, that we do not oblige Nature to over-act her Part; for I have known ſeveral Inſtances, where the ſtagnating Juices have been flung upon the Veins of the Thighs, and ſwell'd thoſe Parts to a ſurprizing Bigneſs: In this Caſe, it will be ſafeſt to diſcharge the ſuperfluous Humours by Stool; ſometimes a gentle Vomit, ſeaſonably adminiſter'd, has reſolved theſe Obſtructions, where no other Remedies would prevail: But this Method is only to be attempted in ſome ſingular Circumſtances, and in particular Conſtitutions, leſt the Force of a Vomit

ſhould

ſhould recal theſe Humours into the Habit again, and fix them upon ſome principal Organ, to the Endangering of the Patient's Life; and therefore ought not to be put in Practice without very good Advice.

AFTER the Obſtructions are reſolv'd, it will be highly neceſſary, that the Patient go through a Courſe of the chalibeat Waters, to reſtore the impair'd Contraction of the Solids; or, if ſhe be of a bilioſe Conſtitution, and extremely weaken'd through the Severity of the Diſeaſe, let her take the Aſs's Milk, with the teſtacious Powders, for a Month or ſix Weeks, and after that Courſe is ended, drink the *Bath* Waters; which Method, ſeldom fails to compleat a ſucceſsful Cure.

## CHAP. VIII.

### *Of the Cure of the Hypochondriack Melancholy.*

BUT, in the Hypochondriack Melancholy, where the Changes in the Motions of the Fibres change the Ideas of the Mind, and affect its Faculties with odd, ridiculous, and unusual Turns of Thinking; as that the Body is chang'd into a Cat, a Dog, a Horse, *&c.* there we must employ more powerful Remedies, if ever we expect to compleat a successful Cure, and render the Faculties entirely free from these Embarrassments. And as the Cohesions of the Blood and animal Fluids are strongly inclin'd to each other, and the Obstructions firmly wedg'd upon the Habit, so they call for Medicines more powerful in their Operation, and that may give a greater Turn to the Disease: For this End, Vomits of mineral Preparations greatly avail in removing

moving that Load of viſcid, glewy Hu- CHAP. 8.
mour, that lies impacted in the Fibres of the Brain, and chains down the noble Faculties of the Soul to this gloomy Way of Thinking.

℞ *Vin. Benedict.* ℥i. *ad* ℥x. *m. Hauſt. propinandus hora 4ta, Pomerid.*

*Applic. Emplaſt. Epiſpaſtic. inter Scapulas hora ſom.*

AND as the Spleen and lower Bowels are generally affected with Obſtructions, when the Diſeaſe ariſes to this height, ſo in ſuch Caſes I prefer the following cordial Purge, to all others.

℞ *Tinct. Sacr. Rhabar. ana* ℥iß, *Syr. de Spin. Cervin.* ℥vi. *Spt. Lavend. C.* ℥i. *m. f. Hauſt.*

OR if the Patient rather affect his Medicines in Form of Pills, the following.

℞ *Pill. Ruff.* ℈ii. *Reſin. Jalap. gr.* viii. *Sal. Vol. Succin. gr.* iv. *ol. Garioph. gutt.* iii. *m. f. Pill.*

PART III.

IF there appear any Symptoms of a Plethora, let the Patient loſe ten, twelve, or fourteen Ounces of Blood. Theſe Symptoms of Fulneſs are not to be diſcover'd from the Appearance of Blood in the Veins; for they are generally large and ſwell'd with Wind; but from the Beating of the Pulſe, which for the moſt part diſcovers, with the greateſt Certainty, the Quantity of Blood in the Veſſels.

THINGS thus diſpos'd, we may then proceed to unlock the Obſtructions, that oppreſs the Organs of the Brain.

℞ *Aſſæ fœtid.* ʒiſs, *Pulv. rad. Zedoar.* ʒi. *Croc. Pulv.* ʒs, *ol. Suc. gutt.* xx. *Syr. de Chalyb. q. ſ. m. f. Pill. capt.* 4tr. *ter in Die ſuperbib. Cochlear.* 5. *Infuſ. ſeq.*

℞ *Summit. Abrotan.* ℥ſs, *Flor. Anthos* ʒii. *Sem. Cardamom. minor.* ʒi. *Rad. Gent.* ℈ii. *Coq. in Aq. Font.* ℔i. *ad* ℥xii. *Col. cui adde Vin. Chalyb.* ʒiv. *m. f. Infuſ.*

Of the Virtues of Aſſa fœtida.

*ASSA fœtida*, of all other Gums, produces the moſt powerful Effects in the Hypochondriack Melancholy, and is greatly preferable to either the *Galbanum*

*num Ammoniacum*, or *Sagapenum*. It re- CHAP. 8.
ſolves the Obſtructions of the Brain, and
by its powerful, penetrating, volatile
Parts, enters thoſe Pores of the Fibres,
that very few other active Medicines are
capable of affecting; for your volatile
Salts ſoon evaporate, and go off by ſome
of the Emunctories, before they pene-
trate into the Receſſes of the Nerves;
while this Gum, by its adheſive Quality,
keeps its Parts more compactly together,
and ſuffers not its Virtues ſo ſoon to ex-
hale.

IF there be any Suſpicion of a ſchir-
roſe Tumour, in the Spleen, Liver, or
Organs of the inferior Bowels, the fol-
lowing will be admirably proper, both to
reſolve the Obſtructions of the ſchirroſe
Matter, and to prevent the Juices from
running into too cloſe Contacts for the
future.

℞ *Calomel. gr.* xvi. *ad* ℈i. *Confect. Fra-*
*caſtor. ſine Melle* ℈i. *m. f. Bol. hora ſom.*
*Sumendus.*

℞ *Mannæ opt. diſſolut. in Aq. Epſom.* ℥iß,
*m. capt. Mane craſtino.*

*Bibat ejuſdem Aquæ ad Quantitat.* ℔ii. *parum coct. in Tempore Operationis.*

℞ *Conſerv. Roſar.* ʒiß, *Æthiop. mineral.* ʒß, *Camphor.* ziß. *Sal. vol. Armon.* ʒß, *cum q. ſ. Syr. Sambuc. M. Elect. capt. Quantitat. Nuc. Moſchat. Mane ſingulo, hora 4ta, Pomerid. & hora Som. ſuperbib.* ℔ß, *Apozem. ſeq.*

℞ *Lig. Sanct. Antimon. crud. in Nod. ligat. ana* ℔ß, *Sarzaparil.* ʒiii. *Rub. Tinct.* ʒi. *Rad. Glycer.* ʒvi. 5*que*, *Radic. Aperien. ana* ʒß, *Coq. in Aq. Font.* ℔vi. *ad* ℔iii. *cui adde Spt. Nitr. Dulc.* ziii. *m. Apozem.*

℞ *Galb. Col. emplaſt. de Ran. cum Mercur. ana part. æqual. m. emplaſt. Siniſtræ Hypochondriæ Applicandum.*

AND to reſtore the impair'd Force of the Stomach, he may take the following Elixir in a Glaſs of generous Wine.

℞ *Elix. Vitriol. Mynſict.* ʒß, *capt. gutt.* xii. *vel* xvi. *ter in die in Hauſt. Vin. albi Mont.*

As ſoon as he perceives his Diſeaſe upon the Decline, it will be highly proper

per for him to try the Effects of the Cold Bath, which, in all ſplenetick and hypochondriack Caſes, not attended with ſchirroſe Tumours, I look upon to be a Remedy ſecond to none; for it purſes up the over-lax *Machinulæ* of the Fibres, reſtores their impair'd Contractions, and by that Means revives the Action of the ſeveral Organs. 

In the mean Time, the Patient muſt be very careful of his Diet, of the Air, and Exerciſe, eſpecially Riding; which I prefer to any we uſe in *England*: For it may be intended or remitted to what Pace or Degree you pleaſe; and the numberleſs Concuſſions, in this Caſe, ſucceſſively coming upon each other, muſt greatly contribute towards reſolving the Obſtructions of the Brain, and other Organs of the Habit, that vitiate the Senſations, and interrupt the Ideas of Objects, from making ſuitable Impreſſions upon the Mind and Faculties of the Underſtanding.

## CHAP. IX.

### *Of the Cure of Melancholy Madneſs.*

THIS is that moſt gloomy Scene to which all ſplenetick Symptoms tend, that are not timely prevented by proper Applications. The Mind under this Species of Madneſs appears often as if it were moap'd, or ſtupid, being fearful to the laſt Degree of Deſpair.

I KNOW it is the Opinion of ſome, that remove the Paſſion that gave the firſt Shock to the intellectual Faculties, and the Effects will ceaſe: But in this they are greatly miſtaken; for I am my ſelf acquainted with a Gentleman who had one only Daughter, that was melancholy mad for Love of a young Gentleman: Her Father, by Advice of Friends, was prevail'd on to admit him to marry her, in Hopes of her Recovery; becauſe though ſhe talk'd greatly out of the way,

way, yet was she always much better in his Presence. But Marriage did not abate the Lunacy, nor remove the Impediment of her Brain; for she attempted several Times to murder him: So that at last they were oblig'd to confine her to a Mad-House, for fear of further Mischief. CHAP. 9.

AND, by the Way, this is as strong an Argument, as can be given to prove, that these Disorders are more dependant on the perverted Motion of the Fibres of the Brain, than any absolute Stubbornness of the Mind; and you may as soon attempt to counsel a Man out of the most violent Fever, as endeavour to work any Alteration in their Faculties by the Impressions of Sound, tho' never so eloquently apply'd; till by proper Applications you have remov'd the Pressure of the corporeal Organs. Impossible to work upon those Persons by Advice or Counsel.

Now in order to restore the Fibres of the Brain under the Melancholy Madness, and recover the Mind from those most gloomy, dejecting Circumstances, to which it is chain'd during the Force of this

PART III. this Diſeaſe, we muſt endeavour to bring their *Machinulæ* into cloſer Contacts with each other; that is, reſtore their Springyneſs, or contractile Powers, whereby the Ideas of ſenſible Objects may ſtrike the Emporium of the Brain, or Seat of the Mind, with a regular Impulſe; and in order to effect theſe ſeveral Intentions, it will be neceſſary to preſcribe all manner of Remedies that may communicate a Stimulus to the Solids.

BLEEDING, therefore, in this Caſe, will be but of very little Uſe, unleſs it be to add a greater Motion to the Fluids, in ſome Caſes, where the Blood is crowded upon ſome particular Organ.

BUT vomiting Medicines are of ſingular Service; as they not only diſcharge the Stomach of its vitious Contents, but as they unload the Brain of that glewy, viſcid Matter, greatly tenacious, that obſtructs its Pores, and hinders a due Secretion of animal Spirits.

THE Vomits that are adminiſter'd, ought to be of the harſher Kind, otherwiſe they will ſcarce influence this Kind of

of Melancholy; becauſe the Nerves are greatly let down beneath their natural Standard, and, in conſequence of that, all the Senſations, as well as Secretions, vitiated to a ſurprizing Degree.

℞ *Suc. Fol. Aſari* ʒß, *ad* ʒvi. *vel* ʒi. *Aq. Peon. C.* ʒiii. *m. f. Hauſt. Vomit. capt. hora 4ta, Pomerid. Vel,*

℞ *Vin. Benedict.* ʒi. *ad* ʒx. *m. Hauſt.*

PURGING Medicines of Black Hellebore, are mightily extoll'd.

℞ *Hellebor. Nig. craſſuſculè pulver.* ʒiß, *Sem. Fænic. dulc.* ʒiii. *Coq. in vin. alb.* ʒxii. *ad* ʒix. *Col.*

℞ *Colaturæ* ʒiii. *Syr. de Spin. Cervin.* ʒß, *ad* ʒi, *Aq. Peon. C.* ʒß, *Spt. Lavend. C.* ʒi. *m. f. Hauſt. capt. Mane.*

IF, by the Force of the Operation, the Spirits be very languid, we muſt have recourſe to Opiates at the Time of Reſt.

℞ *Aq. Ceraſ. Nig. Aq. Theriac. ana* ʒiß, *Syr. è Mecon.* ʒß, *Extract. Thebaic. gr.* iiß, *m. f. Hauſt. hora ſom. Sumendus.*

*

AND

AND as Blisters both stimulate the Solids, and raise the Spirits, so upon no Account are they to be omitted.

ISSUES, sometimes, cut on the Nape of the Neck, profit very much.

℞ *Aſſæ fœtid.* ℥iii. *Sal. vol. Armon. Camphor. ana* ℥iß, *Balſ. Peru gutt.* xx. *Rad. Zedoar.* ℥i. *cum q. ſ. Syr. de Chalyb. m. f. Pill. capt.* 4ta. *Mane, hora* 4ta *Pomerid. & hora ſom. ſuperbib. Cochlear.* 6. *ſeq.*

℞ *Ellebor. Nig.* ℈iß. *Flor. Chamomel. M.* i. *Rad. Gent.* ℥i. *Sem. Cardamom. minor.* ℥i. *Coq. in Aq. Font. q. ſ. ad* ℈x. *col. cui adde Vin. Chalyb. Aq. Peon. C. ana* ℈iii. *Spt. Lavend. C.* ℈ß, *m. f. Infuſ.*

Of the Virtues of Camphire.

CAMPHIRE, of all other Remedies, has the greateſt Force upon this Kind of Madneſs: For as the Fibres of the Brain are greatly relax'd, and let down beneath their natural Standard, ſo is it neceſſary, that we procure a Set of Medicines that may paſs the minuteſt Pores;

* And

And no Remedy in the Univerſe is known to divide farther than Camphire, which conſiſts wholly of volatile Parts, and will in Time all fly away, if expos'd to the Air. CHAP. 9.

Now as this Diſeaſe is generally attended with too great a Moiſture in the Brain, ſo will it not only paſs, not only dry up that ſuperfluous Moiſture, by its warming, heating, attenuating Qualities, but alſo reſtore the Texture of the Brain, or at leaſt, which is the ſame Thing, thoſe Fibres that compoſe this noble Organ.

CAMPHIRE, therefore, given to the Quantity of two Scruples, or half a Dram, at leaſt, is of ſingular Service, and will paſs thoſe fineſt Veſſels, where few other Remedies, of a groſſer Texture, are cable of penetrating: Nor is there any Danger to be apprehended from this Quantity of Camphire; becauſe the Fibres of the Brain, under this Diſeaſe, being depreſs'd in their Contractions, demand a Remedy, that, by its powerful Operation, may aſſiſt their Motions, and ſcrew up their over-lax Texture to a due Standard.

WHEN

WHEN we have diſengag'd that glewy viſcid Matter, that diſconcerts the *Machinulæ* of the Fibres, by proper Medicines that evacuate by Vomit, Stool, and the other Diſcharges of Nature, we muſt then proceed immediately to brace and reſtore the over-lax Solids with Meats and Drinks that comfort the Blood, enrich the Spirits, and enliven the noble Principles of Life; and therefore a moderate Degree of generous Wine, as it exhilarates the Spirits, promotes Digeſtion, and facilitates the Blood's Circulation, ſhould always be indulg'd to melancholy Perſons.

BUT, upon the Failure of all other Remedies, we muſt have recourſe to the Cold Bath inſtituted in a particular Manner. In this Caſe, let the Patient be flung from a conſiderable Height into the Water; or let the Water fall from a conſiderable Height upon his Head, and Parts affected.

A VERY worthy Gentleman, on whoſe Fidelity I may ſafely rely, aſſur'd me, that

that he perfectly knew a Person that for several Years had been melancholy mad, who, in one of his frantick Fits, flung himself out of a Window three Story high; but accidentally pitching upon a Draw-Well, he fell plum down into the Water, and being taken up, was perfectly recover'd to the Use of his Senses again. It was computed, he fell near thirty Fathom before he came to the Surface of the Water; and the Well was about six Fathom deep under Water.

## CHAP. X.

### *Of the Cure of Lunacy, or the Raging Madness.*

The Difference between Melancholy Madness and Lunacy.

I CALL that kind of melancholy Madness, where Men rave in an extravagant Manner, Lunacy; because it is only the same Disease, improved in a hot, bilious Constitution; that is, as in the former Cases of the Hypochondriack Melancholy, Natural Melancholy, and Religious

PART III. ligious Melancholy, the *Machinulæ* of the Fibres, that compoſe the Brain and Organs of the ſeveral Senſes were diſconcerted, and ſet at too great a Diſtance from each other; ſo, in this of Lunacy, their Springs are drawn too near each other, that is, their Fibres are too much under a convulſive State, or State of violent Contraction, and therefore will demand the Aſſiſtance of all Remedies, that may relax, ſupple, and bring down their *Machinulæ* to their natural Standard.

Now, as in the former Caſes, Bleeding, Purging, and Medicines of the harſher Operation, if too frequently us'd, were prejudicial to the Patient, ſo will it be abſolutely impoſſible to give any conſiderable Turn to the Diſeaſe under theſe Circumſtances, without inſtituting a Courſe of Medicines of the moſt violent Operation; and if that be not ſufficient to bring down the Spirit of theſe Stubborn Perſons, we muſt endeavour to reduce their artificial Strength by compulſive Methods.

CONCERNING the Adminiſtration of Medicines in Lunacy or Madneſs, it is a Misfortune, that we ſeldom uſe thoſe that are proportion'd to the Greatneſs of the Cauſes, and conſequently that are capable of compleating a ſucceſsful Cure; that is, thoſe that are capable of making thoſe Alterations in the Fibres of the Brain, neceſſary to procure a Freedom from thoſe Affections, the Mind labours under during the Continuance of this Diſeaſe. CHAP. 10.

GIVE me Leave to ſay, that no Man can have a tenderer, or more compaſſionate Concern for the Miſery of Mankind than my ſelf; yet it is Cruelty in the higheſt Degree, not to be bold in the Adminiſtration of Medicines, when the Nature of the Diſeaſe abſolutely demands the Aſſiſtance of a powerful Remedy, and more eſpecially in Caſes where there can be no Relief without it.

IT is owing to theſe ſafe Men, that do but little Good, and a great deal of real Miſchief, that chronick Diſeaſes are ſo riſe now-a-days, and ſo generally in-

PART III. curable; not that they are so in themselves, but only render'd so by those, that are afraid to proceed in a Way only capable of curing them.

IN this Case, therefore, the most violent Vomits, the strongest purging Medicines, and large Bleedings, are to be often repeated.

℞ *Mel. Ellebor.* ʒiß, *Vin. Benedict.* ʒi. *m. f. Haust. Vomit. capt. hora 4ta Pomerid. & rep. pro re nata.*

℞ *Ellebor. Alb. crassiusculè contus.* ʒiii. *Rad. Zedoar.* ʒi. *Crem. Tart.* ʒß, *coq. in Aq. Font.* ʒvi. *ad* ʒiii. *cui adde Syr. de Spin. Cervin.* ʒvi. *Aq. Peon. C.* ʒii. *m. f. Haust. capt. Mane & rep. pro re nata.*

*Fluat Sang. è Vena jugulari ad Quantitat.* ʒxvi. *& repet. pro re nata si Furor in Anima restat.*

*Applic. Emplast. Epispastic. toto Capiti eraso.*

As the Habit, under this State of Lunacy, is generally hot and dry, so Camphire

phire will be a very improper Remedy to be given in theſe Circumſtances. CHAP. 10.

IN this Caſe, *Ens Veneris* will prove a moſt excellent and ſovereign Remedy.

℞ *Ent. Veneris* ʒß, *Pulv. Sem. Agni Caſt. Lactucæ, ana* gr. xii. *Pulv. Heleni* ∋ß, *m. f. Pulv. capt. omni Mane & Hora 4ta Pomerid. ſuperbib. Cochlear.* 6. *ſeq.*

℞ *Aq. Rut.* ʒvi. *Aq. Peon. C.* ʒii. *Syr. Atrip. Olid.* ʒi. *m. f. Julap.*

℞ *Ent. Veneris* ʒß, *Pulv. Sem. Rut.* ∋i. *Opii crud.* gr. iiß, *Confect. Rhaleian.* ∋i. *m. f. Bol. capt. ſingulâ Nocte cum Cochlear.* 4. *Julap. præſcript.*

AFTER Bleeding, Purging, and Vomiting, and theſe Operations have been often repeated, we muſt then have recourſe to cooling, ſoftening, and relaxing Apozems and Emulſions, in order to ſupple the Solids, relax their *Machinulæ*, and unbrace the Fibres of the Brain.

℞ *Decoct. Pectoral.* ℔iß, *Aq. Nephritic.* ʒii. *Syr. Alth.* ʒiß, *m. f. Apozem.*

OR in case the Fœces be hard, and come not away kindly, the following.

℞ *Aq. Malvæ* ℔ii. *Syr. Alth. Violar. ana* ʒii. *Spt. Nitr. Dulc.* ʒiii. *m. f. Apozema capt.* ℔ß, *omni Mane horis 2bus ante prandium & Hora 4ta Pomerid. vel:*

℞ *Sem. Papaver. Alb.* ʒvi. *Amigd. dulc.* ʒii. *Sem. 4tr. frigd. major. ana* ʒiß, *Contund. in Mortario Marmoreo sensim, affundendo Aq. Hord.* ℔ii. *Col. cui adde Syr. Violar. Rosar. Dam. ana* ʒiß, *m. Emulsio.*

AND as under Melancholy Madness the Cold Bath, or the Patient flung from a considerable Height into the Water, is of singular Service; so the Warm Bath, or the Patient's falling from a considerable Height into warm Water, must be of great Consequence in this Case, to soften, relax, and let down the *Machinulæ*

*chinulæ* of the Fibres within their pro- CHAP. 10.
per Spheres again.

BUT, in this Caſe, we muſt be highly careful, that in the Purſuit of theſe rigorous Meaſures, to pull down this artificial Strength, we do not too much relax the Fibres, and ſuffer them to ſink beneath their natural Standard; for ſometimes, upon the Diſcharge of that tenacious Matter, that holds the Fibres of the Brain too cloſely connected, their *Machinulæ* generally ſink; upon which, the Patient, that but juſt before was raging mad, becomes extremely dull, and ſtupidly melancholy.

THE firſt Symptoms that diſcover this Change about to be, is a ſudden Fit of Crying, preceded by a ſmall Interval of Gloom and Sadneſs. The Patient burſts out in Tears, and begins to perceive, with ſome Degree of ſenſible Reflection, Marks of his ſad, wretched, and miſerable Condition.

IN this Caſe, all our Endeavours muſt be us'd, as much as poſſible, to prevent this Change; becauſe it is ſeldom known, that the Patient ſurvives it above a Month.

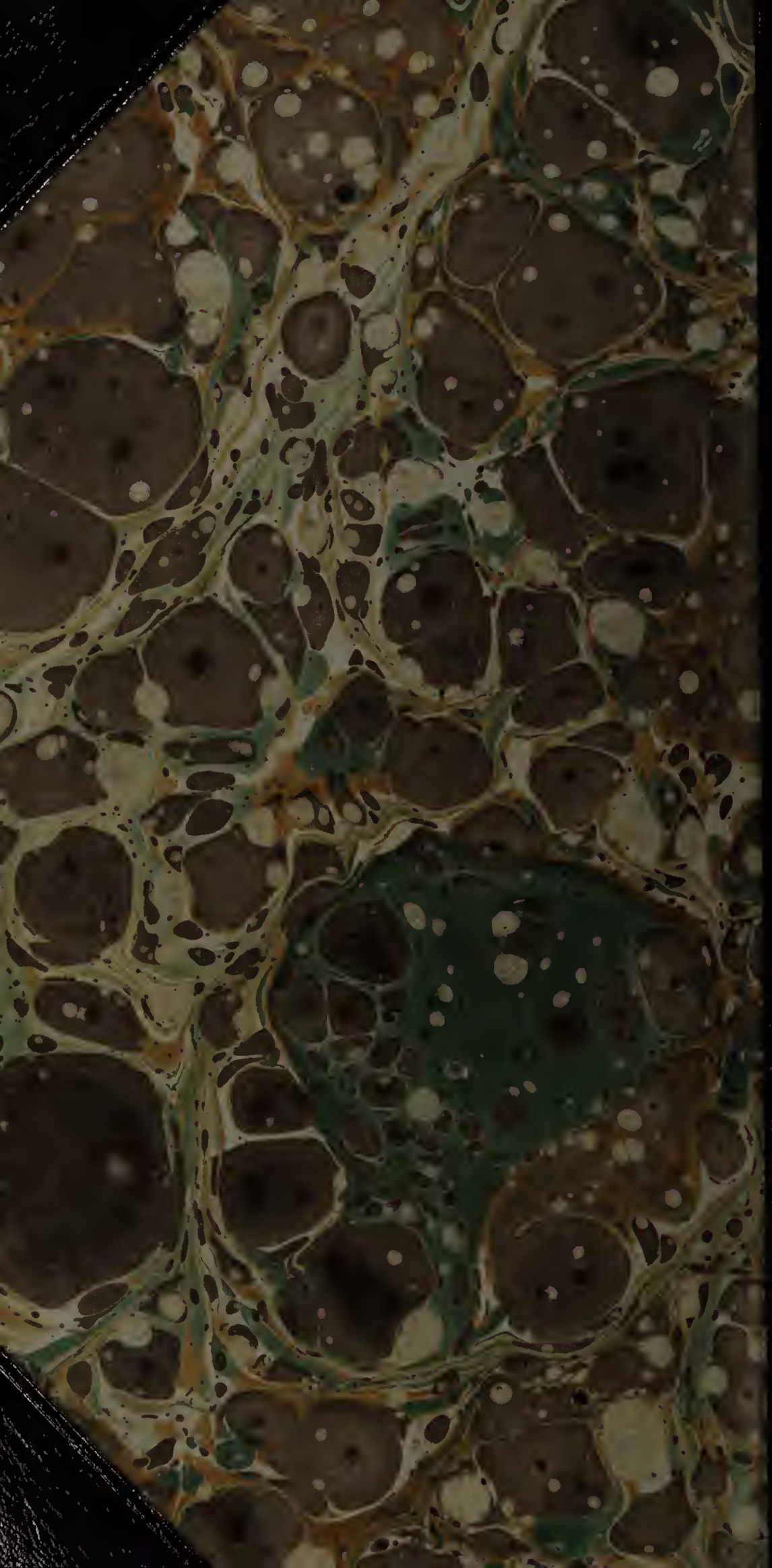
To this End and Purpoſe, we muſt preſcribe the moſt generous Medicines, and employ all Arts and Means to keep up the Contraction of the Solids, revive their Motions, and prevent them as much as poſſible from lapſing into this dangerous, and often fatal State.

WHILE the Madneſs holds on, a ſpare, thin, attenuating Diet is known to be of ſingular Service, which, in conjunction with the foregoing Remedies, I believe will be able to relieve any Degree of Lunacy, capable of a Cure.

AND certainly a great many of our religious Viſionaries, and *French* Prophets, that ſwarm'd here in ſuch Numbers, would have done much better under the Hand

Hand of the Phyſician, than the ſecular Arm. Strong Purgatives, Bleeding often repeated, and the Diſcipline and Management neceſſary in ſuch Caſes, would much eaſilier have pull'd down that over-weaning Opinion of Self-holineſs, by which they were ſpirited to believe themſelves, what all the World were perſuaded they were not, and which would be the propereſt Means to prevent thoſe numberleſs Blaſphemies belch'd out againſt God, againſt Things ſacred, and againſt the awful Dignity of Majeſty itſelf. CHAP. 10.

THUS I have gone through the Nature, Cauſe, and Cure, of all the moſt perplexing Phænomena, that affect the animal Powers, from the ſlighteſt Symptoms of the Spleen and Vapours, to the moſt confirm'd Affections of Melancholy Madneſs and Lunacy: In which Proceeding I have endeavour'd to place theſe ſeveral Subjects, in the cleareſt Light their abſtruſe Natures would admit; and have endeavour'd to demonſtrate, that they

PART III. they are no imaginary Whims or Fancies, but real Affections of the Mind, arising from the real, mechanical Affections of Matter and Motion, whenever the Constitution of the Brain warps from its natural Standard.

*F I N I S.*